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SURVEY OF YUGOSLAVIA

1 December 1942

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Section III

POPULATION AND SOCIAL CONDITIONS

15. General

a. Early History. Coming from the region of the Dnieper Valley, the Yugoslavs entered the Balkans about the sixth century. At first they were one people, divided into several tribes. In the tenth century, however, the Slovenes were absorbed by the Holy Roman Empire, while Croatia, after a brief period of glory, became a dependency of Hungary in 1102, coming under Hapsburg rule in 1527. Both Slovenes and Croats adopted Western Catholicism.

The Serbs were converted to Christianity by followers of Saints Cyril and Methodius in the ninth century, and adhered to the Eastern Orthodox Church. The Serbs expanded from the twelfth to the fourteenth century, reaching their peak under Stephan Dushan (1331-55), who controlled most of the Balkans, including northern Greece. In 1389, however, the Serbs were overwhelmed by the Turks at Kosovo, and lost their independence. The Serbs, nevertheless, took pride in their great stand at Kosovo, and its anniversary, June 28, became the national holiday ("Vidovdan"). The unconquered Serbs of Montenegro, as well as some Serbian and Croatian irregulars, kept up a constant fight against the enemy during the four centuries of Turkish rule.

1804-1903. In 1804, under the leadership of Karageorge Petrovich, the Serbs revolted and by 1807 they had managed to become masters of the whole region of Belgrade. The Treaty of Bucharest (1812) gave them a vaguely defined autonomy. However, the Turks, who were then at peace with Russia, soon reconquered Serbia, forcing Karageorge to flee. A new Serb uprising in 1815, led by Milosh Obrenovich and supported by the Russian Tsar was successful in establishing limited autonomy in a restricted territory. In 1830 the

Turks formally granted autonomy to Serbia, with Milosh as hereditary prince. He abdicated in 1839.

The new ruler was Michael Obrenovich, whose progressive policy led to his dismissal in 1842. Alexander Karageorgevicl was his successor, but in 1859 he, too, was forced to abdicate. Milosh reascended the throne, soon to be followed by the former ruler Michael Obrenovich (1860-68). During this period the Serbs gained strength at the expense of the Turks, and maintained good relations with their neighbors.

Under Milan Obrenovich (1868-89) Serbia fought two wars. The first, with the Turks, ended in 1878 with an increase in territory granted by the Treaty of Berlin. The ambitions of the Serbs were frustrated, however, by the Austro-Hungarian occupation of Bosnia and Herzegovina. The Serbs were encouraged by the Austrians to expand to the southeast, and this led to a disastrous war with Bulgaria in 1885. The corrupt and pro-Austrian rule of Prince (later King) Milan and his son Alexander aroused much popular resentment, which led to the assassination of Alexander and Draga, his queen, by a group of nationalist army officers in 1903.

1903-1914. The accession of Peter Karageorgevich (1903-21) finally established the pro-Russian orientation that lasted until the First World War. There was constant trouble with Austria-Hungary, backed by Germany. The Austrians hoped to dominate the Serbs, while the latter with their supporters in the Hapsburg domains, strove to free the Yugoslavs under the Austro-Hungarian yoke. By the Sanjak Railway scheme, by a tariff war (1904-1911), by the annexation of Bosnia and Herzegovina in 1908, and by preventing Serbia from gaining access to the Adriatic during the Balkan wars, Austria tried to subjugate her small neighbor. The Sarajevo incident, which led to the World War, was the culmination of this conflict.

1920

1914-1918 During the early stages of the World War Serbia repeatedly defeated Austria-Hungarian armies, but when the Austrians received help from Germany and Bulgaria Serbia was crushed and her armies were forced to retreat over the mountains of Albania to the Island of Corfu. There they were rested and rearmed, and they subsequently formed the backbone of the Allied front at Salonika.

1918-1929. On September 23, 1918, in Zagreb, representatives of all the Yugoslav peoples in Austria-Hungary formed a National Council, which demanded unification of the Yugoslavs and declared their independence of Austria-Hungary. On November 11, the Executive Committee of the National Council decided on union with Serbia, leaving the form of government to be worked out by joint agreement. On December 1, King Alexander received the delegates of the Council and proclaimed the Kingdom of the Serbs, Croats, and Slovenes. A Constituent Assembly was elected on November 28, 1920, and on June 28, 1921 (Vidovdan) the Skupshtina (Parliament) adopted the first Yugoslav constitution (the Vidovdan Constitution).

A very large majority of the Yugoslavs wanted a united Yugoslavia, but there was sharp disagreement as to internal organization. The Serbian majority wanted a centralized state, while the Croatians, the next largest group, wanted a federal system. The Vidovdan Constitution was adopted by a vote of 223 to 35--but as many as 161 deputies abstained from voting. Under the circumstances there was ample opportunity for the Italians, Hungarians, and Bulgarians to fish in troubled waters.

The ensuing domestic struggle exhausted both the government and the Skupshtina. There were three elections to the latter, but it was never able to function effectively. No uniform legislative code was adopted for the country as a whole; prewar laws were still used in many regions. Bitter

1920

political disputes, chiefly between the Croats and the dominant Serbs, caused frequent crises in the government. During its first ten years, cabinet changes averaged nearly three a year, with a total turnover of 130 cabinet ministers in this decade. The most serious crisis occurred on June 20, 1928, when a Montenegrin deputy mortally wounded two Croat deputies in the Skupshtina chamber.

King Alexander now attempted to end this internal friction by issuing a manifesto (January 6, 1929), in which he suspended the Constitution, dissolved the Skupshtina, and assumed dictatorial powers. He thus became the first Balkan dictator. If he had hoped for domestic reconciliation, he was disappointed, for this move aroused great disaffection, and conditions became so bad that in 1931 he was forced to announce a modified constitution. The concessions, however, were more apparent than real. Almost all sections of the population were in opposition to the government and the country was on the verge of an upheaval, especially when Dr. Vlatko Machek, the Croat leader, was imprisoned. Before a domestic explosion occurred, however, King Alexander was assassinated in Marseilles on October 9, 1934.

b. Summary of the contemporary social scene. The period between 1934 and 1941 is characterised by efforts to put an end to the dictatorship and to find some solution to the problem created by the demands of the Croats for a larger share in the government. In trying to avoid or postpone a domestic show-down, the Belgrade government began flirting with the Axis powers. The interaction of these factors contributed to the events of 1941.

Yugoslavia as a political unit has been dismembered since April, 1941. The invasion and the new boundaries have inevitably affected the social pattern to some extent, but the basic factors have not been changed, and will therefore

be described as they were before the invasion. Where changes are known to have occurred, they will be indicated.

More than 80 per cent of the 15 million inhabitants of Yugoslavia are still essentially rural, although there has been a strong drift to the cities since the establishment of the kingdom in 1919. Due to their diverse development the three South-Slav groups comprising the bulk of the population differ in their religious affiliations as well as in other respects. The Roman Catholic Croats and Slovenes have a western outlook, yet they have been outweighed as a political force by the Greek Orthodox Serbs. The scene is further complicated by a Moslem Serb minority and by the several national-minority groups inhabiting the districts near the former Albanian, Greek, Bulgarian, Rumanian, and Hungarian frontiers. Nevertheless, the various Slavic groups speak essentially the same Serbo-Croatian language and share a proud tradition of resistance to invaders from east and west. Despite the monarchic form of government, and the dictatorship established in 1929, the Yugoslavs have long been accustomed to democratic principles and practices, and among foreign nations none commands greater admiration than the United States.

While the peasant's standard of living is lower than that of western Europe, conditions are best in the more densely populated districts in the north--that is, in Croatia and Slovenia. Bosnia and Northern Serbia are less prosperous while severe poverty is the lot of the scattered mountaineers in the south. About 2/3 of the holdings in 1931 were below the minimum average needed to support a family, so that large numbers of peasants leave their farms after the harvest in search of other work. There are probably 2 million peasants with very small holdings, or none at all.

separate press agency and at least two Croatian and one German paper, which are pro-Axis, anti-Serb and separatist. Radio propaganda is relatively ineffective, inasmuch as only about 1 per cent of the people own radio sets.

16. Population

According to the census of 1931, the population numbered 13,934,034, with 150,784 more females than males. The population had increased by 16.3 per cent (1,949,127) during the preceding decade. 1/ The estimated total for the end of 1939 was 15,703,000. 2/

In 1937 the number of live births was 423,794, or 27.93 per thousand, while deaths numbered 242,184, or 15.96 per thousand. The natural increase for that year was thus 181,610. 3/

The age distribution of the population in 1931 is shown below:

Under 14	4,825,247
15-19	1,285,104
20-24	1,371,551
25-29	1,175,059
30-49	3,123,802
50-59	1,004,749
60 and over	1,146,661

The male population between the ages of 20 and 44 numbered 2,460,736 in 1931. 4/

14,287 Yugoslavs emigrated to European countries in 1937, (7,607 of them to France), and 5,378 to non-European countries (2,432 to the United States). It should be noted, however, that 6,729 Yugoslavs returned from abroad in 1937. 5/ The effect of emigration upon the population trend has been almost negligible in recent years. It is believed, however, that if entrance into the United States were not so difficult, many more Yugoslavs would emigrate to this country.

In 1931, the population density was 146 per sq. mi. Except for the prefecture of Belgrade, the greatest density is in Dunavska Banovina (province), which had a population of 198 per sq. mi.; while Zetska Banovina, the area of least density, had 77.5 per sq. mi. In general, the population is

most concentrated in the more fertile regions of the north, and is sparse in the mountainous regions of the south. 6/ On December 31, 1938, the Yugoslav population, by provinces, was estimated to be as follows: 7/

Dravska	1,198,000
Drinska	1,821,000
Dunavska	2,532,000
Moravska	1,630,000
Primorska	974,000
Savska	2,911,000
Vardarska	1,780,000
Vrbaska	1,195,000
Zetska	1,040,000
Belgrade	409,000
Total	15,490,000

Primorska, Savska, and part of Vrbaska Banovinas were merged on August 26, 1939, into what was to have been the autonomous Banovina of Croatia.

The urban population in 1931 was less than two million (1,939,235), or about 14 per cent of the total, although it had increased almost one-third since 1921. If the same rate of increase continued, the urban inhabitants must have numbered about 2½ million at the end of 1940. 8/

In 1931 Yugoslavia had 52 towns with a population of over 10,000. The largest cities were the following: 9/

Belgrade and suburbs	320,000	Sarajevo	78,183
		Skoplje	68,616
Zagreb	185,581	Novi Sad	63,985
Subotica	100,058	Ljubljana	59,765

17. Ethnic and social groups.

Originally homogeneous, different groups of the Yugoslav people have through the centuries been subjected to widely different influences. The Slovenes who settled in the Alps were subjugated by the Germans as early as the eighth century; those Slovenes who settled along the Drava river were subjected to Magyar influence. Many Slovenes were Germanized or Magyarized, although the majority of them

retained their separate identity. As, however, they accepted western Catholicism and were in contact with Germans and Magyars, they were drawn into the stream of western European culture.

The Croats, also, have a western rather than an eastern orientation. Like the Slovenes, they are Catholic, and have been exposed to German, Hungarian, and Italian influences more than to that of the Turks. They have succeeded, however, in retaining their national consciousness to a greater degree than did the Slovenes. 10/

The Serbs, on the other hand, faced towards the east rather than the west: they adopted the Cyrillic alphabet and are Eastern Orthodox in religion rather than Catholic. They were independent longer than were the Croats and Slovenes, and even in recent times the identity of the Serbs remains the more distinct. Turkish control over the Serbs, lasting from the 14th to the 19th century, added a new Eastern influence to that of Byzantium and the Orthodox Church; in this sense the conquest further emphasized the line of difference between the Serbs, on the one hand, and most of the Croats and Slovenes on the other. Some Albanians and Turks settled in southwestern Serbia, and some Serbs and Croats even accepted Mohammedanism. On the other hand, by causing some of the Serbs and Croats to move northward, the Turkish conquest contributed to a certain extent to the intermingling of the Serbs, the Croats, and the Slovenes. Finally, the conquest brought centuries of intermittent war and plundering to the area under Ottoman control.

For a discussion of the distinguishing characteristics of the Serbs, the Croats, and the Slovenes, see paragraph 19 below.

Minority groups

Moslems formed about 11 per cent of the population of Yugoslavia and are most numerous in Bosnia, Herzegovina, the Sanjak of Novi Bazar, and southern Serbia. 11/ The great majority of these Moslems are Serbs and have retained their Serbian language and customs; they therefore form a "minority" only in a religious sense. Other Mohammedan Slavs include the Torbeshi, Apovci, and Pomaci--small scattered groups. 12/

Turks. Turkish immigrants have been largely assimilated. There are about 135,000 Moslem Turks, for the most part in South Serbia, in the cities and areas southeast of Skoplje along the left bank of the Vardar river. These are mostly descendants of early Osmanli colonists. 13/

Other Slavs--Czechoslovaks, Russians, Ruthenians, and Poles--comprise about 1.46 per cent of the population, 14/ and are found chiefly in the northern part of the country.

Germans constitute about 4.22 per cent of the population, and live chiefly in the north. 15/ They are descendants of eighteenth-century settlers.

Magyars, in the northeast, constitute 3.90 per cent of the total population. 16/

Rumanians, who are 1.93 per cent of the total population, live in the districts along the former Yugoslav-Rumanian frontier. 17/

Albanians, 3.67 per cent of the total population, live in the south Serbian regions of Kosovo, Vardar, and Morava. They replaced the Serbs who had migrated before the Turkish invasions. 18/

Small groups of Jews (0.49 per cent), and Gypsies, Cincars, (an old group of Rumanian origin), and Italians (0.11 per cent) constitute the balance of the population. 19/

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Social structure. The population of Yugoslavia is overwhelmingly peasant in origin, with almost no landholding aristocracy. The city population is small. There is a great social gap between the urban dwellers and the 80 per cent or more of the population who constitute the peasantry. They are like hostile worlds with two conflicting ways of living and thinking and little in common except language.[20/]

The bourgeoisie is small and of mixed origin. In the Croat and Slovene cities it derives from medieval times or from German settlers. In Serbia the bourgeoisie is descended largely from Greeks and Cincars. Old Turkish guild traditions are still found in some of the eastern Yugoslav cities.[21/]

An unhealthy feature of urban life is an underpaid intelligentsia, many of whom are ready to serve any master. On the whole, however, the intellectuals are convinced liberals, voting in opposition to the government and taking the lead in democratic movements.[22/]

18. Language.

However much Serbs, Croats, and Moslems may differ in religion, culture, traditions, or aspirations, they speak the same Serbo-Croatian language, which is used by 80 per cent of the people of Yugoslavia. The Slovene language, used by five per cent of the population, differs very littl from Serbo-Croatian, which is a highly inflected language, like Russian or Latin, but contains many Italian, German, and Turkish loan-words.

The peasant vernacular of Yugoslavia can be divided into three dialects, named according to the words meaning "what" (shto, kai, cha):[23/] 1) Shtokavski, spoken in Serbia, Montenegro, Vojvodina, Bosnia-Herzegovina, and most

of Dalmatia and Slavonia; 2) Kajkavski, spoken in the Croatian regions of Zagreb, Varazhdin, Krizhevac, Belovar, Medjumurje, the northern ports of the Croatian seacoast and to some extent in Istria; 24/ 3) Chakavski, spoken in central and eastern Istria, some of the Dalmatian islands, and in Dalmatia north of the peninsula of Peljeshac. 25/ The Shto dialect is the most widely used and is the literary language. All three dialects are very similar.

There is also a Macedonian dialect closely akin to Serbian, but having some Bulgarian characteristics. No accurate statistics are available on the number using this dialect.

The Serbs use the Cyrillic alphabet, while the Croats and Slovenes use Latin characters. Any Yugoslav with a primary school education is familiar with both.

Educated Yugoslavs know either French or German or both. In the regions formerly belonging to Austria-Hungary, particularly in North Slovenia, Croatia, and Vojvodina, there are many small merchants and officials who know these languages. Along the Adriatic Coast there are many who speak Italian. The required foreign languages taught in the Yugoslav schools varied from province to province.

Other languages spoken in Yugoslavia include Albanian, Greek, Rumanian, Hungarian, Turkish, and Gypsy. None of these is important in comparison with Serbo-Croatian.

English is not spoken to an appreciable degree, except by a few Yugoslavs who have returned from America. These are for the most part in the Zetska and Primorska provinces. In the larger cities the better educated groups and the higher officials use English to a small extent. An English interpreter would be indispensable for Americans in Yugoslavia.

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19. Characteristics of the people

While the Yugoslavs all have the same general origin, outside influences have produced considerable regional diversity of social behavior. Tradition has a stronger hold in the poorer districts of the south than in the better-off and more cosmopolitan north. In the mountainous southern regions the patriarchal form of family organization, with profound respect for age and authority, is frequently encountered, especially in Montenegro and Herzegovina, where the peasant household is usually controlled by its domachin, or older.

The Yugoslav peasant is proud of his capacity for work, as well as of his people's long record of resistance to foreign rule. Resistance against the national oppressor takes different forms in different regions: The Croat submits with clenched teeth, combining stubborn passive resistance with sabotage; the response of the Serb is apt to be open resistance with outbreaks of fierce violence; the Slovenes are sober and industrious and least given to violence. 26/

Long experience has ingrained in many of the South Slavs the conviction that parleying with their oppressors is useless, and that violence is more effective in politics than discussion and persuasion. Belief in the vendetta code is widespread even among the educated. Gavrilo Princip, the man who killed Archduke Franz Ferdinand at Sarajevo, confessed that his strongest motive was revenge. The Serbs are the only people to celebrate the anniversary of their greatest defeat as their national holiday (Vidovdan, June 28, when their army was routed by the Turks at the battle of Kosovo). To the Serbs this celebration signified a fervent yearning for revenge, and faith that freedom would rise again from the grave. 27/

Nationalist feelings run high, but in the peasant they

take a less irrational form than in the intellectual. The peasant's patriotism is love of the land, which he fiercely defends. But while he is proud and firm against the intruder, he is more reasonable and tolerant in regional disputes than the intellectual.

The Serbs, especially the mountaineers, are the stormiest and most violent of the Yugoslavs, showing little respect for legal forms and being prone to swift and energetic action. The Croat is less impulsive: the Serb will change his policies when they prove unsuccessful, whereas the Croat will cling to one policy and wait. The Croats of the Dinaric Alps, however, can hardly be distinguished from local Serbs in temperament, physique, and costume. They are aggressive, dynamic, and rash. Most of the Croat revolutionaries have come from their ranks. 28/

The Yugoslavs--the Serbs in particular--have won a high reputation as soldiers. They are loyal and well-disciplined and have high courage and tremendous endurance. Their officers are noted for their steadfast and aggressive spirit and for a high sense of duty. In the first World War the Serb army suffered terrific hardships, and yet in 1918 it was the spearhead of the Allied forces at Salonika. 29/ The reports of heavy losses by the Italians, and the fact that the Yugoslavs are the only "conquered" nation in Europe that still maintains an army in the field are proof of Yugoslav fighting spirit.

The Yugoslavs are good organizers, with a fondness for democracy. Even the smallest Yugoslav commune has its own government. The peasants meet frequently to discuss their village affairs and to elect their leaders. While the village authorities have limited power, nevertheless this organization has given the people experience in self-government and has helped to knit the village together.

While the Croats and Slovenes under Austria-Hungary had their provincial diets and city governments, the independent Serbian kingdom gave the Serbs a greater experience in self-government. After 1903 the Serbian monarchy was noted for its democratic character. Since the first World War the Croats and Slovenes have also displayed excellent organizing ability, as shown by the strength of Machek's Peasant Party and Koroshec's People's Party. The Moslems likewise have their own political and cultural organizations.

The attitude of the Yugoslavs toward the United States is extremely favorable. President Wilson's support of Yugoslav claims at the Versailles conference has not been forgotten. Moreover, the Yugoslav immigrants who returned home after years spent in this country have helped to create an attitude favorable to America. Many Yugoslavs were sufficiently interested in American affairs to follow the 1940 presidential election and to take a keen interest in the Louis-Schmeling fights.

20. Living conditions

After the first World War, the agrarian reform law parcelled out all estates with more than 750 acres of cultivated land or over 1250 acres in total area, but the majority of the peasants were not greatly benefited. The standard of living varies widely from one region to another, although it is generally low when judged by the standards of western Europe. Vojvodina, Slavonia, Croatia, and Sloveni have a higher standard than northern Serbia and Bosnia, which in turn are better off than poverty-stricken Herzegovin Montenegro, and southern Serbia. The lack of communications and a simple rural economy tend to preserve regional differences which are caused largely by the geography of the various sections. In Croatia and Slovenia the light, fertile

1320 soil is divided into small holdings of from 5 to 12 acres,

each parcel worked by the family unit. In the Vojvodina the rich, heavy earth requires more expensive farm equipment, thus giving rise to a large landowning peasantry as well as a class of landless laborers. 30/

Of the 1,985,725 farms in 1931, 1,340,149 or about 2/3 were holdings of less than 12.4 acres, the officially estimated minimum required to support a family of five. Only 56,271 holdings were larger than 59 acres. 31/

Moreover, more than 1.4 million of the twelve million peasants own no land at all and must earn their living as seasonal farm workers. Many economists hold that more than two million Yugoslav peasants should leave the land and give their time entirely on wage labor. 32/

In the Karst mountain region, running all along the Adriatic coast and extending far inland (including much of Dalmatia, Herzegovina, Montenegro, parts of Bosnia and Croatia, or about one-third of the entire country), stark poverty is often found. Pura, a gruel of ground grain, is the chief food. The Karst peasant can produce only a fraction of the food he needs, and must buy the remainder, thus he is compelled to work for any wage - sometimes in winter for a handful of pura. His life is centered around the struggle to escape starvation. So great is the poverty that often three men share one pair of shoes among them. Four men will share one winter coat. Nine-tenths of the peasants are indebted to local merchants. 33/ Most households do not own carts. Those that do exist are of the most primitive kind, made entirely of wood. Plows of wood or half of iron are prevalent. 34/

In the Morava valley, Vojvodina, Slavonia, and parts of Croatia, many of the peasants have a better life. They manage to earn money from their produce, and can enjoy a few "luxuries."

In these northern valleys the clothing is better than in the Karst region. Occasionally the peasants wear factory-made clothes, and shoes. But the majority of the population are very poor. Homemade cowhide sandals, sometimes soled with pieces of old tires, take the place of factory-made shoes, which are rarely worn outside the cities.

The housing of the peasants varies. In Slavonia, along the shores of the Danube, and in the Morava valley, their cottages are fairly comfortable, with a modest supply of furniture. Even in the Croatian highlands there is at least one bed in every neat little house. In the more backward mountain regions, however, only the well-to-do have beds; otherwise people sleep on straw or on the earthen floor. In barren Herzegovina, the huts are of stone or wood, two stories in height. Livestock is housed on the ground floor, the family upstairs. In Macedonia, untidy, dirty groups of huts are scattered on the mountain slopes. Wattled mud huts are prevalent in the marshes. There are no toilets.

Moreover, in Karst region the water supply is capricious - floods in fall and spring, and drought in summer. 35/

Many peasants work on the land only in summer, leaving in the fall in search of jobs as cart-drivers, maids, lumberjacks, construction workers, and the like. At least half of the peasantry would accept some sort of wage work if they could get it. In the past many Yugoslav peasant workers emigrated to the United States, but that outlet has been almost completely closed in recent years. 36/

In 1938 the output of agriculture was estimated at 19 billion dinars ($[illegible],000,000), compared with the output of private industry valued at 6 billion dinars ($219,000,000).

Eighty percent of the population were engaged in agriculture, but this group received only 50% of the national income. 37/

The primitive conditions of peasant life in Yugoslavia have maintained a significant social institution - the zadruga or collective family. This is a collection of several generations in a tight economic unit, as nearly self-sufficient as possible. Each member contributes the work for which he is trained (farming, masonry, blacksmithing, etc.), and all share in the returns under the administration of the zadruga chief. The zadruga is rapidly disappearing, though isolated instances can still be found in Eastern Herzegovina, Montenegro, and Macedonia. 38/

The cooperative is another institution that is rooted deeply among the Yugoslav peasantry. The Croat Peasant Party, under the leadership of Dr. Machek, has developed two groups of cooperatives, Gospodarska Sloga (Economic Concord) and Seljachka Sloga (Peasant Concord). The Serbs have a similar, though less-developed organization, Seljachko Kolo (The Peasant Circle). These institutions combat illiteracy, supply lectures and films on health and agriculture, work for better agricultural wages and more efficient buying and selling, and encourage peasant arts.

In the cities, life for the workers is little if any better than it is for the rural population. Many of the urban laborers eat little but beans and onions, sleep on the floor of a shed with dozens of others, and work ten hours a day for three dollars a week. 39/ Many, however, do not fare worse than workers elsewhere in Europe.

The bourgeoisie, few in number but of growing importance, appears to be relatively prosperous. They live and dress for the most part according to European standards and styles.

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The government has made efforts to improve social conditions beginning with the introduction of collective agreements between employers and workers and the establishment of a minimum wage in 1937. Compulsory health, disability, old age, and death insurance was established by law, together with a pension system for all employees. 40/ It is not known how far these measures had been applied in practice before the country was invaded, but it seems probable that the scanty financial resources of the government prevented it from accomplishing much for the improvement of the condition of the people.

21. Labor

In general it may be said that there is no clearly defined industrial laboring class in Yugoslavia. The mines and factories are manned largely by peasants, some of whom return home for the summer farming. Most of the labor force is unskilled, and craftsmen and technicians are largely foreigners. 41/

The occupational structure of the population is suggested by the following table which classifies heads of households according to occupation (data for 1936): 42/

Agriculture, stockraising, forestry, fishing	1,963,403
Industry and handicraft	317,923
Commerce and credit	78,048
Communications	68,394
Public service and learned professions	109,974
Army and navy	9,093
Day laborers	37,916
Retired	34,380
Miscellaneous and unknown	40,178
Total	2,709,309

In 1938 there were 715,186 workers (including 526,457 males) who were insured under the compulsory state insurance system. 43/ The actual number of workers is, however, somewhat larger than these figures indicate. Insurance did not cover workers in all enterprises, nor did it cover the many peasants who augment their agricultural income by part-time work in local factories. Nevertheless, even when these categories are included, the laboring class constitutes less than 10 per cent of the population. 44/

Aside from the number of heads of households engaged in industry and handicraft in 1936 given in the above table, figures on the number of industrial workers are not available. In the pre-war period some 50,000 were employed in mining enterprises. 45/ There were usually a considerable number of unemployed, the number varying seasonally. In March of 1938 there were 100,219 idle; by the end of the year the number had dropped to 64,225. 46/

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The average daily wage in 1938 was 23.64 dinars, or about 70 cents (about $21 a month), according to one source. 47/ Another source puts the average wage of a worker at 600 dinars a month, or $17.90 (equivalent in buying power to about $36.00). 48/

The trade union movement is not very effective. Two organizations several years ago attempted to control labor, especially in the mines: the Socialist International Union, of radical tendencies, having about two-thirds of the total union membership, and the more moderate Socialist National Union, with one-third of the members. 49/ In 1928 the government established Labor Exchanges to centralize the labor supply and demand, to assist workers in finding jobs and to provide unemployment relief. There also was a Workers' Chamber (Radnichka Komora), composed entirely of representatives elected by the workers, which concerned itself with the social and economic interests of the workers. 50/

Important changes in the labor situation have taken place since the invasion by the Axis forces. Immediately after the Nazi occupation of Yugoslavia, 50,000 Croatian workers and peasants were conscripted for work in Germany, followed later by conscription of great numbers of Slovenian workers and peasants . In April, 1942, 40,000 Serb workmen were reported in Germany, with 20,000 more due to follow. 51/ In addition the Axis powers have in their hands about 300,000 Yugoslav prisoners of war. The Nazis have evicted several hundred thousand Slovenes, most of whom have found refuge in Serbia. 52/ No information is available as to the labor situation in parts of Yugoslavia occupied by other Axis powers.

22. Public health, sanitation and hospitals.

It is understood that this section is to be prepared by the Office of the Surgeon General from data furnished by the

East-European Section, O.S.S.

23. Education

Illiteracy is an important Balkan phenomenon, in Yugoslavia as elsewhere. The 1931 census indicated that 4,408,471 persons aged ten years or more were illiterate (44.61 per cent of this age group). The proportion of illiterate females in this age group was higher than in the case of males--56.40 per cent as compared with 32.27 per cent. 53/ The rate of illiteracy varied considerably in different parts of the country, being lowest in the Slovenian regions in the north and highest in western Bosnia and southern Serbia. In 1931, the rate of illiteracy in the various banovinas was as follows: 54/

Dravska	5.54 per cent
Drinska	62.11 " "
Dunavska	28.87 " "
Moravska	61.96 " "
Primorska	57.46 " "
Savska	27.67 " "
Vardarska	70.86 " "
Vrbaska	72.60 " "
Zetska	66.04 " "
Belgrade	10.87 " "

The following table shows illiteracy to be greatest in the older age groups: 55/

Illiteracy According to Age Groups in 1931

11 - 14	43.2 per cent
15 - 19	46.2 " "
20 - 24	52.3 " "
25 - 29	53.6 " "
30 - 59	59.2 " "
60 and over	72.9 " "

The situation has probably not improved much since 1931, since, except for the campaigns waged against illiteracy by the army and the peasant societies, almost half of the country's children still received no schooling, although the Educational Law of 1929 provided that "public education is universal, compulsory and free...Attendance at primary school and at upper primary school is compulsory, and its duration is eight years". 56/

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In 1937-38 there were 1,691,628 pupils and students of all ages, from kindergarten to the institutions of higher learning. Of these, 1,393,422 were in the primary schools. 57/ Thus, less than 56 per cent of the elementary-school-age population (more than 2,500,000 from 6-14 years of age in 1931) received any schooling in 1938.

In 1938-1939 the national government spent 995,697,000 dinar ($29,691,684) on education, or 7.7 per cent of the national budget. In addition, the various units of local government spent 122,137,000 dinars ($3,642,125) or 9 per cent of all expenditures, on education. 58/

Until 1929 there was great diversity of education, but the law of that year made the educational system uniform. Instruction was generally in the national language, although the law provided that in the elementary schools the language of instruction might be changed to suit the needs of the localities. National minorities were permitted to have their own schools in their own tongue, although the Serbo-Croatian language was also to be taught to the pupils as a second language. 59/

Yugoslavia had a number of secondary schools of various types, including gymnasia, commercial schools, normal schools, theological seminaries and agricultural and trade schools. In addition, there were three universities with full courses, at Belgrade, Zagreb, and Ljubljana, with a separate arts faculty at Skoplje and a law faculty at Subotica. The enrollments in 1937-38 were: 60/

Belgrade University	7,786	students
Ljubljana "	1,860	"
Skoplje	157	"
Subotica	519	"
Zagreb University	5,885	"

Other institutions of higher learning were the Military Academy at Belgrade and the Naval School at Dubrovnik,

1320 schools of pedagogy and colleges of engineering at Zagreb

and Belgrade, and the School of Economic and Commercial Science at Zagreb. The national learned societies in Yugoslavia were the Royal Academy of Sciences at Belgrade and the Academy of Science and Art at Zagreb. 61/

In 1937-1938 the number of students enrolled in the various faculties was as follows: 62/

Law	5,698
Arts and Sciences	2,802
Medicine	1,814
Engineering	2,184
Agriculture and Forestry	1,104
Theology	769
Veterinary Medicine	635
Economics and Commerce	771
Pedagogy	229
Academy of Music	107
Academy of Fine Arts	94

According to a recent report, Yugoslav universities and technical schools have been turning out engineers, technicians, and professional men more rapidly than they could be absorbed by the national economy. Many of these young men, often from poor families, attracted by the low tuition costs, found themselves faced with unemployment and poverty upon graduation. In consequence, many of them turned to some form of radicalism, sometimes orthodox Marxian communism, but more often vague agrarian socialism. 63/

24. Religion

Before the German invasion, full freedom of religion existed in Yugoslavia, remaining intact even after other civil liberties had been curtailed. Each religious group was given autonomy in conducting its own affairs, subject only to the supreme control of the state. Religious property was exempt from taxation, and the church enjoyed use of the postal and telegraph facilities without charge. The clergy had many privileges, but were forbidden to act in a manner incompatible with their dignity or their religious vocation. Religious instruction was provided in the schools

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by arrangement with the ecclesiastical authorities of the various denominations. 64/

Each denomination had its own courts, which dealt with ecclesiastical affairs and cases involving marriage and divorce. In 1938-1939 the following ecclesiastical courts were functioning: 65/

1	Orthodox high court
21	Orthodox diocesan tribunals
20	Roman Catholic courts
2	Old Catholic courts
1	Evangelical court
3	Jewish courts

The relations between state and church were entrusted to the Department of Religions of the Ministry of Justice. 66/ In 1935-1936 the national budget made annual appropriations in proportion to the number of their adherents for each religious of the following/denominations: 67/

Serbian Orthodox Church	$1,142,900
Roman Catholic and Uniate Churches	791,012
Moslem Community	458,548
German Lutheran Church	19,144
Slovak Evangelical Church	11,928
Christian Reformed Church	11,988
Old Catholic Church	10,999

According to the census of March 31, 1931, the principal religious denominations had the following numbers of adherents: 68/

Orthodox	6,785,501	48.1 per cent
Catholics	5,217,847	37.6 " "
Moslems	1,561,166	11.2 " "
Lutherans	175,279	1.3 " "
Calvinists	55,890	0.4 " "
Jews	68,405	0.5 " "
Uniates	44,671	0.32 " "
Old Catholics	7,273	0.05 " "
Other Christian sects	16,208	0.12 " "
Other religions	264	0.00 " "
No religion	1,107	0.01 " "
Unknown	427	0.00 " "

The Orthodox church, which is autocephalous, is the church of the Serbian majority, and is the strongest and most influential in Yugoslavia. It is closely linked with Serbian nationalism. Although the Serbs are not very

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religious, they esteem their church for its past services. When the medieval Serb state fell before the Turks, it was the Orthodox church that kept alive the national spirit in the long struggle for freedom. Its clergy is drawn from the masses of the peasantry and often sides with them rather than with the ruling group. When the Regent, Prince Paul, wanted to submit to German demands in 1941, Patriarch Gavrilo and other high churchmen supported the coup that overturned the government. 69/ As a result, the Patriarch is still in a Nazi prison. Many priests and even bishops are fighting with the Chetnik forces. Apparently the Nazi have succeeded in finding some Quislings among the churchmen, as indicated by the fact that the Holy Synod in Belgrade recently requested the Chetniks to cease shedding blood. 70/ In Croatia Anton Pavelich, pro-Nazi leader, has succeeded in setting up a new, independent Orthodox Church. In general, however, the Orthodox church is closely identified with Serbian nationalism.

The Catholic church is strong chiefly in Croatia and Slovenia, where the people are more religious than the Serbs. Catholicism is not identified with the local feelings of the people as is Orthodoxy in the Serb districts. The Catholics of Yugoslavia acknowledge the Pope as their spiritual head. There is considerable jealousy and animosity between the clergy of the Catholic and the Orthodox churches. When Stojadinovich tried to ratify the Concordat with the Vatican in July, 1937, in an attempt to conciliate the Croats, an outburst of Serb Orthodox wrath led to rioting in Belgrade. The Catholic church in Yugoslavia has apparently not taken a definite stand on Yugoslav-German relations, either before the coup d'etat against Prince Paul or after the invasion.

1320 The Moslems, who enjoyed great religious freedom in

Yugoslavia, since 1930 were organized in a Sunnite community, under the authority of a reis-ul-ulema (religious leader) at Belgrade. They had their own schools, and courts where Moslem law was applied in cases involving religious, family and testamentary matters. 71/ While there is no definite evidence available, it is believed that the Moslems occupy a favorable position under the present occupation regimes.

The several Protestant denominations are confined largely to the German, Hungarian and Slovak minorities. There are some Croatian Protestants and in South Serbia there are Macedonian Protestant communities which were established by American missionaries.

The Jews were not numerically important in Yugoslavia before the invasion, and there was very little anti-Semitism. Since then, the usual Nazi discriminations have been applied in Belgrade and Zagreb and these have been extended to the Gypsies.

25. Public order and police

In general, the Yugoslavs have a low crime rate. The peasants, who comprise 80 per cent of the population, are not prone to larceny, in spite of their great poverty. They have also endured much social and economic injustice and oppression without striking back. If their lands are threatened, however, they will fight furiously, no matter what the consequences might be.72/ In contrast to the peaceful peasantry, the intelligentsia, especially the university students, have protested and demonstrated against any wrong, real or fancied. These demonstrations at times took the form of pitched battles with the police, sometimes resulting in serious casualties.73/

In 1938, the latest year for which statistics are available, 19,587 persons (17,742 males, 1,845 females) were convicted of crimes. Of these a considerable number were guilty of theft (5,050), while 6,626 individuals were convicted of various degrees of assault and manslaughter. 4,515 persons were guilty of offences against the state. Included in the total were 2,648 crimes of various kinds committed by minors. Most of the offenses were committed by persons in the 26-30 age group, with the 21-25 category second.74/ The number of death penalties showed a steady decline after 1934, and in 1938 no death sentences were pronounced. Forty life sentences and 650 sentences of from 5 to 20 years were imposed in 1938. The total number of prisoners in that year was 7,123.75/

During the nineteenth and early twentieth centuries the Yugoslavs gained a reputation for political assassination, chiefly of Turks and Austro-Hungarians and their supporters, but on occasion even of their own rulers. Since the creation of the Yugoslav state, however, this form of

political action has been largely abandoned, except by fanatical minority groups. In Macedonia the IMRO carried on a campaign of terrorism, with considerable covert support from Bulgaria, Italy, and Hungary. King Alexander, during his visit to Bulgaria in 1934, may have helped to persuade the Bulgarian government to suppress the IMRO. Unfortunately for Alexander, Georgiev, one of the triggermen of this organization, found an opportunity that same year to kill the Yugoslav king in Marseilles. An organization similar to the IMRO, the Ustashi, under Ante Pavelich, existed in Croatia. Harbored by the Italians at Ancona and Brescia, and trained in a Hungarian camp at Janka Puzta, the Ustashi perpetrated a number of bomb outrages upon Yugoslav soil.[76]

The police organization was a centralized state institution under the control of the Minister of Interior. There were two main types of police, the city police and the rural police or gendarmerie. In time of crisis the gendarmerie might be called on to assist the city police. The two branches wore different uniforms.

The police administration was under the jurisdiction of the Chief Police Headquarters at Belgrade, a department of the Ministry of Interior. In performing their duties, however, the local police were responsible to the mayor of their commune or city, and to the governor (ban) of the banovina. Only the Commandant (upravnik) of the Belgrade police was responsible directly to the Chief Police Headquarters.[77]

The gendarmerie, or rural police, was a semimilitary organization under the joint control of the Ministry of Interior and the Ministry of the Army and Navy. It was organized along military lines by regiments, battalions,

and companies. The gendarmerie was at the call of the local civil authorities, but in general it enjoyed more independence in performing its functions than did the city police.

The unsettled conditions following the Nazi occupation of Serbia have led to a certain reorganization of the police system and to a considerable increase in numbers.[79/]

26. Press, propaganda, and censorship

Press. There were two press associations in Yugoslavia--the Central Press Bureau, which was official, and Avala, which was semi-official. Their function was to furnish news to the foreign as well as the domestic press. The Central Press Bureau was largely a propaganda agency, presenting news from the government point of view and publishing articles and pamphlets on Yugoslavia. Avala presented foreign news, but always in a light that favored the government. After the German-Yugoslav war these press associations disappeared and the Yugoslav government in exile set up, in addition to its London office, its wartime press bureau Jugoslavenski Informacioni Centar (Yugoslav Information Center) in New York, which issues a bulletin called Obaveshtanja Shtampi (Press Information). The primary purpose of this bureau is to supply the foreign and Yugoslav press with information on the Yugoslav and allied war effort. The puppet state of Croatia has its own press agency, Croatia.

Censorship. After King Alexander's suspension of the Constitution in 1929, press freedom ceased to exist, and censorship was set up. Every editor was ordered to submit a copy of his publication to the censor before printing. Some newspapers did not attempt to survive and voluntarily ceased publication; newspapers that

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continued publication took care to avoid dangerous controversial topics.80/ Section Twelve of the Constitution of 1931 proclaimed that "everyone is free, within the limits of law, to express his opinion by word of mouth, in writing, pictures, or by other means." This provision did not bring real freedom of the press, as the clause "the limits of the law" was interpreted as the government saw fit.81/

Newspapers from England, France, Italy and Germany fared better than Russian papers, which were never allowed to enter Yugoslavia. French papers, however, were sometimes confiscated. English papers were rarely excluded, perhaps because so few people read English in Yugoslavia, while many read French.82/

Publications. Some Yugoslav publications are published in the Cyrillic alphabet (chiefly in the Serb regions), while others appear in Latin type (chiefly in the Croat and Slovene regions). In 1938, there were 1,223 newspapers and periodicals, of which 138 were printed in foreign languages.83/ The number of publications was naturally larger where the population is denser. There were 33 daily newspapers published in 1938, of which 8 were printed in foreign languages.84/

The most important newspaper was Politika (Politics), published in Belgrade, in Cyrillic characters. It was very powerful and well-respected, being read by Croats and Serbs alike. It was pro-Ally and democratic in tone, but not sympathetic with communism, although not anti-Russian. Vreme (Time), also published in Belgrade in Cyrillic characters, was not well liked, and had a smaller circulation. It represented the official, (Stojadinovich) viewpoint, being pro-German and opposed to the Allies, and anti-Russian. The third Belgrade newspaper, Pravda

1320 (Truth), also in Cyrillic characters, was democratic and

pro-Ally, but not pro-Russian. It was not very influential.

Two important newspapers were published in Zagreb, using the Latin characters. Novosti (News), with a large circulation, for the most part upheld the government's policies. Hrvatski Dnevnik (Croatian Daily) was the organ of Dr. Machek's party and represented Croatian views above all, often in opposition to the government. In Ljubljana, Slovenec (The Slovene), in Latin characters, represented the views of Dr. Koroshec, and therefore supported the government.

Three outstanding periodicals, democratic in tone and with wide circulation, were Nova Evropa (New Europe), published in Zagreb, using both alphabets; Srpski Knjizhevni Glasnik (Serbian Literary Herald), published in Belgrade in Cyrillic characters; and Pregled (Review), published in Sarajevo, in both alphabets. These periodicals covered a wide range of subjects, including the political, scientific literary, sociological, sport, professional, and technical fields.

All of the above publications ceased to exist after the Yugoslav defeat. Vreme, the Stojadinovich paper, changed its policy, now appearing in Belgrade as Novo Vreme, representing the puppet government. There are a number of other papers appearing both in present-day Croatia-Deutsche Zeitung in Kroatien, Hrvatski Narod (Croatian People), Nova Hrvatska (New Croatia), and in Serbia-Donauzeitung, Obnova (Regeneration), all of them opposed to a unified Yugoslavia. The Yugoslav government-in-exile depends on numerous newspapers published in Serbo-Croatian in various foreign countries, such as the United States. But these papers cannot reach present-day Yugoslavia. The official newspaper of the government-in-exile,

Sluzhbene Novine (Official Journal), reports all important changes in Yugoslav political affairs.

The press is the best and most suitable medium for informing the Yugoslav public. Although the percentage of illiteracy is very high in some of the poorer regions, printed materials nevertheless reach more people than any other medium.

Radio. Only few had access to a radio set even in peace time; on April 30, 1940 there were 168,730 licensed radio sets.85/ This figure is little more than one per cent of the total population of the country, which was estimated as 15,703,000 at the end of 1939. Since the partitioning of the country and the fascist "new order," even the above number must have been reduced considerably. The Yugoslav government makes frequent radio broadcasts to the people at home--urging them to aid and cooperate with Drazha Mikhailovich's Chetniks, and emphasizing Allied victories and German persecutions--but these broadcasts obviously can reach only a minute proportion of the population directly. Apparently Croats still listen to Allied broadcasts as the Croatian Information and Propaganda Office, on May 10, 1942, reiterated a warning against doing so.86/

Section IV.

POLITICAL

27. General.

Before the war with Germany, Yugoslavia was a constitutional monarchy, with a highly centralized government. The king had large powers, as the ministers, the officials of the banovinas and the police were all responsible to him. The Assembly, or Skupshtina, elected by universal manhood suffrage, had financial control, but was subject to considerable interference on the part of the government, with which much of the population was frequently in conflict. In 1939 a more liberal regime was instituted, marked by the establishment of autonomous Croatia. The communal governments have always been fairly democratic.

The dismemberment of the former Yugoslav kingdom after the Axis invasion resulted in the annexation of extensive areas by Italy, Germany, Hungary and Bulgaria, and in the creation of puppet states in Serbia, Croatia and Montenegro. These states exist largely by virtue of military occupation by Axis forces, which are constantly menaced by guerillas and considerable popular hostility.

In former Yugoslavia none of the political parties commanded a nation-wide majority of the voters. The influence of the Yugoslav Radical Union has been waning since 1941. The leader of its Moslem wing in Bosnia has gone over to the Pavelich regime in Croatia, while the Slovene Clerical Party, another wing of the Radical Union is losing ground to more secular forces. The Agrarian Party has favored Serbo-Croatian harmony and is pro-Russian despite its opposition to Communism. The Independent Democrats, comprising Yugoslavs of former Austria-Hungary, allied themselves with the relatively powerful Croatian Peasant

Party. Today the Independent Democrats and the Croatian Peasant Party differ from the Agrarians chiefly in professing a more liberal type of democratic program. While the leaders of these parties are now either in exile or imprisoned, thousands of their followers, together with an unknown number of Communists, are carrying on a determined struggle against the invaders. Only the Croatian Ustashi, a minor fascist group which, even before the war, relied chiefly on Italy for encouragement, has lent its support to the Axis.

Prior to the expansion of the power of Nazi Germany the Yugoslav government relied upon France and Great Britain for help in resisting the revisionist demands of Italy and Hungary. During these years cordial relations were maintained with Greece, Czechoslovakia and Rumania, the formerly hostile relations with Bulgaria improved in 1934. Albanian nationalism was favored by Yugoslavia as against the Italian vassal regime. Following the assassination of King Alexander late in 1934, however, the Yugoslav Government, ignoring the wishes of the population, saw fit to rely more and more on the Axis powers. The policy of the present government-in-exile and the activities of the Chetniks represent a return to the foreign policy of 1920-1935 and correspond to the wishes of most of the population.

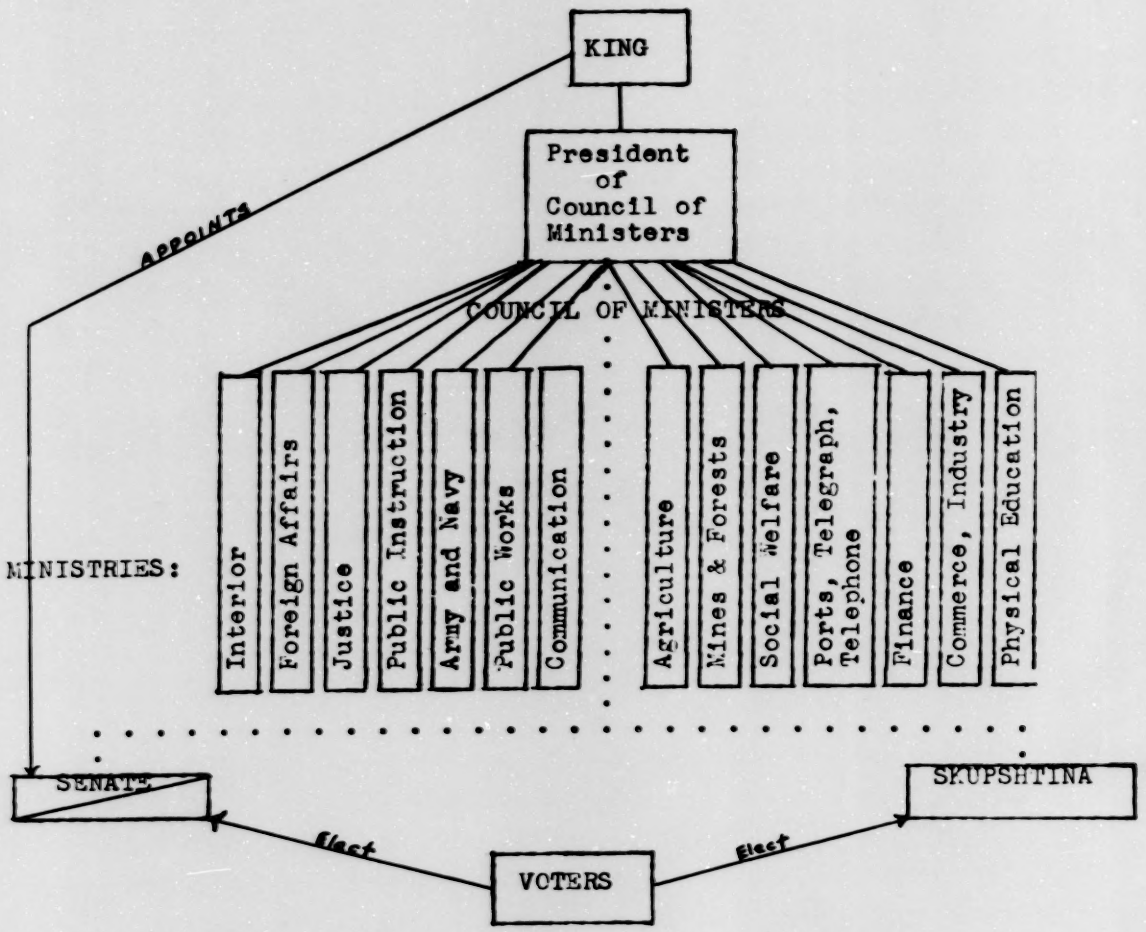
28. Government.

1. During the period between October, 1934 and March, 1941, Yugoslavia was a constitutional monarchy, headed by a Regency under Prince Paul. The young King, Peter II, assumed full royal power only on March 27, 1941, a few days before the collapse of his kingdom.

Legislative power. The Constitution of 1931 provided for a bicameral legislature composed of the Skupshtina (Chamber of Deputies) and a Senate. Legislative power was

1320 exercised by the King in conjunction with Parliament, which

Figure 1. NATIONAL GOVERNMENT, KINGDOM OF YUGOSLAVIA



met every year and might not be dissolved until the budget had been voted. Bills were submitted by ministers or by members of the Chamber. The latter was elected for four years by direct, free, equal and universal manhood suffrage. Half of the Senators were appointed by the King and the other half elected for six years, by a very restricted suffrage. 87/ (See Figure 1, National Government).

In actuality the Regent and the cabinet exercised control over the Skupshtina. In the election of 1935 Prime Minister Jeftich, by interfering in the elections, which were by open voting, received for his party 60.6 per cent of the total vote, and 82 per cent of the seats (303) while his chief opponent, Dr. Machek, received 37.4 per cent of the votes but only 18 per cent of the seats (67). 88/ In reality, Jeftich had been repudiated, as more than one million votes were cast for Machek, while another million abstained from voting. The governmental machine, backed by the civil service, the radio, and most of the press secured only 1,747,037 votes. 89/

The election of December 11, 1938 had the same result. Stojadinovich, the Prime Minister, received 54.09 per cent of the votes, and Machek, 44.09 per cent. The Stojadinovich bloc, however, received 82 per cent of the seats in the Skupshtina. 90/

Executive. The King exercised full administrative power through ministers appointed by and responsible to him. Through the responsible ministers he appointed all officials of the central government as well as the bans (provincial governors), the Prefect of Belgrade, the nachelniks (sub-prefects), and the mayors of some of the larger communes. In the communes, however, considerable legislative power was in the hands of councils elected by universal male suffrage. 91/ (See Figure 2, Administrative System).

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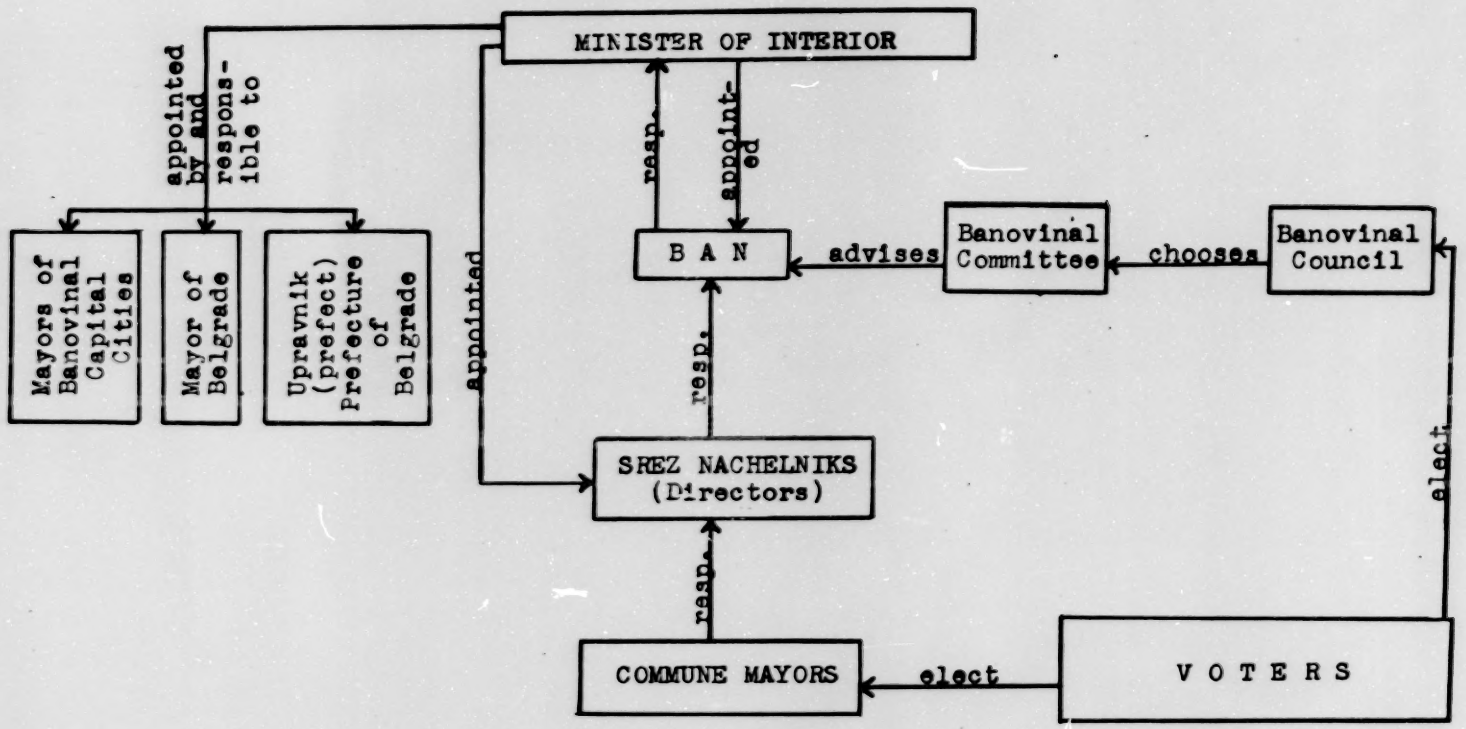
Figure 2. ADMINISTRATIVE SYSTEM



1. King, on the advice of the Minister of Interior, appoints mayors of banovinal capital cities, mayor of Belgrade, upravnik (prefect) of Belgrade Prefecture, srez nachelniks (county director), and the bans. Judges of the court system are appointed by the King on the advice of the Minister of Justice. The voters elect banovinal council, which chooses banovinal committee to advise ban. The voters elect commune mayors.
2. This chart illustrates the administrative organization of all of Yugoslavia with the exception of the Ban of Croatia. For the explanation of the peculiar status of Croatia see text, p. 37.

In 1939 the autonomous Banate of Croatia was established with a ban appointed by the King, but responsible both to the Croatian Sabor (Diet) and to the King. The Banate had wide jurisdiction over health, education, economic matters, social insurance and the like. 92/

City government. The typical city was governed by a mayor and a council, both elected by universal manhood suffrage. In the banovinal capitals, however, the mayors were appointed by the Crown. The mayor appointed officials, controlled the communal police, and acted as executive. The council passed municipal ordinances and controlled the finances. The city revenues were derived from a property tax and an octroi (municipal customs duty). While there was a good deal of municipal autonomy, the officials of the central administration had the power to interfere in municipal government. 93/ (See Figure 3, Local Government).

Judiciary. Yugoslavia had a uniform court system (although in Croatia after 1939 the courts were largely autonomous). For the country as a whole there were district and banate courts, Courts of Appeals and a Court of Cassation. The jury system was not used, and the judges were given a large amount of discretion in applying the law. The judges were appointed and removable by the king or his ministers. 94/ (See Figure 4, Judiciary).

2. After the conquest of Yugoslavia by Germany, portions of its territory were annexed by four of its neighbors and parts were merged into separate regions possessing nominal independence. In much of Slovenia, Dalmatia, Croatia and Serbia, however, Axis control is largely nominal as severe fighting is frequently reported between the Chetniks and the armies of occupation.

Annexed territories. The Slovenes, numerically weaker than the Serbs or Croats, had no separatist government to

assume power. In spite of German cultural influence, they were almost as hostile to the Axis as the Serbs. Italy annexed the smaller western portion of Slovenia together with the capital, Ljubljana, thus adding to her already large Yugoslav population in Istria; the rest, including the industrial city of Maribor, was annexed to Germany. The local administration is probably similar to that in other territories annexed by Italy and Germany.

Dalmatia, which the Croats might have claimed, was annexed by Italy. In addition to a small section of Croatia proper, Italy is reported to have annexed most of the Adriatic islands, a portion of the mainland adjacent to the island of Zara (previously held by Italy) and the enclave around Kotor (Cattaro), a natural naval base and a tourist mecca. The rest of the Dalmatian littoral has been placed under Italian military occupation.

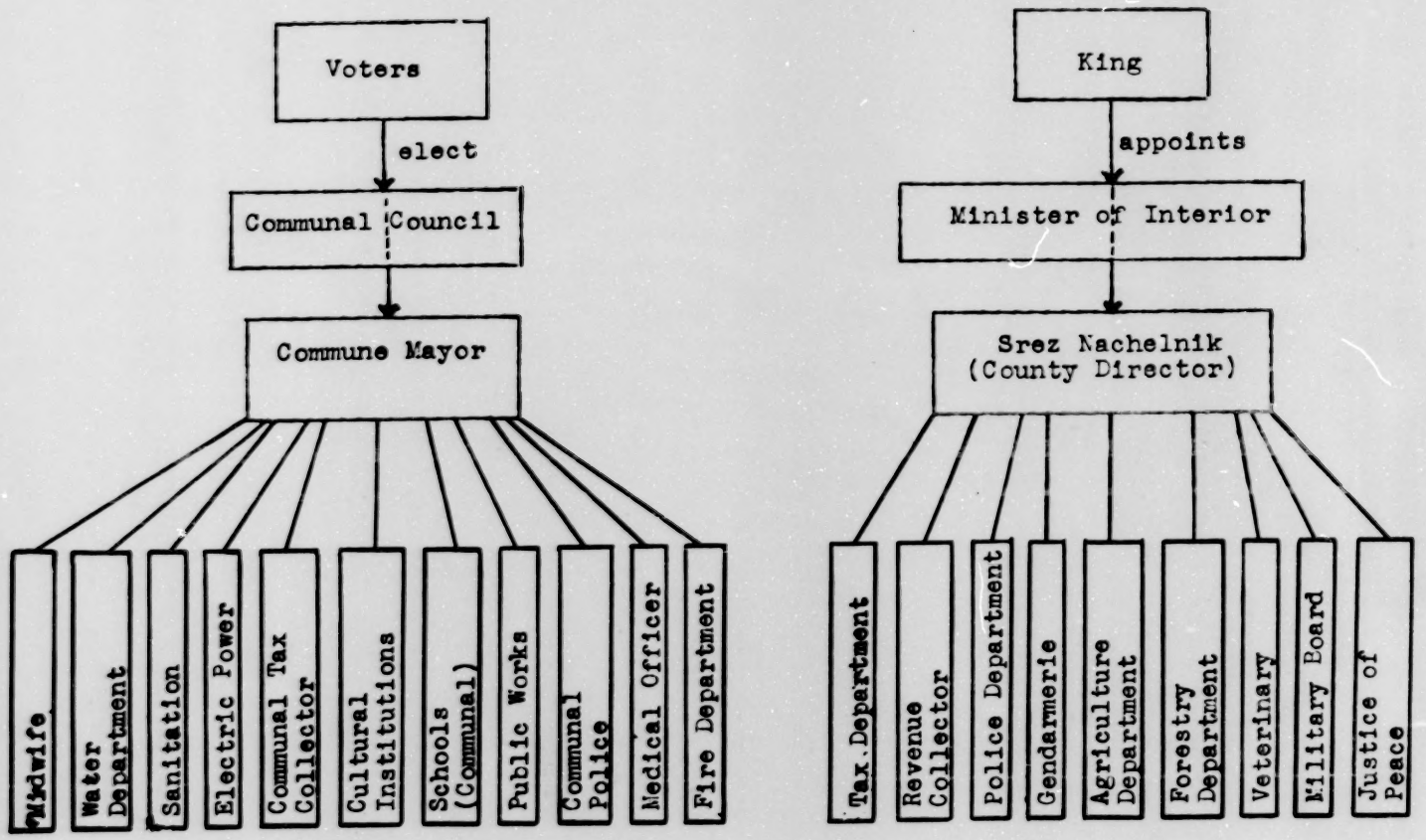
South Serbia and part of Serbia were annexed by Bulgaria and local administration has been fully integrated with the Bulgarian system.

Bachka, between the Danube and Tisza rivers, Baranja, between the Danube and Drava, and a small strip on either side of the Mura river, east of Slovenia, have been given to Hungary as part payment for cooperating in the dismemberment of Yugoslavia.

The Banat, located in the angle formed by the Tisza and the Danube rivers and the Rumanian frontier, is under German military occupation. There have been recent rumors that Hitler contemplates using this area as a nucleus for a new German state in Southeastern Europe.

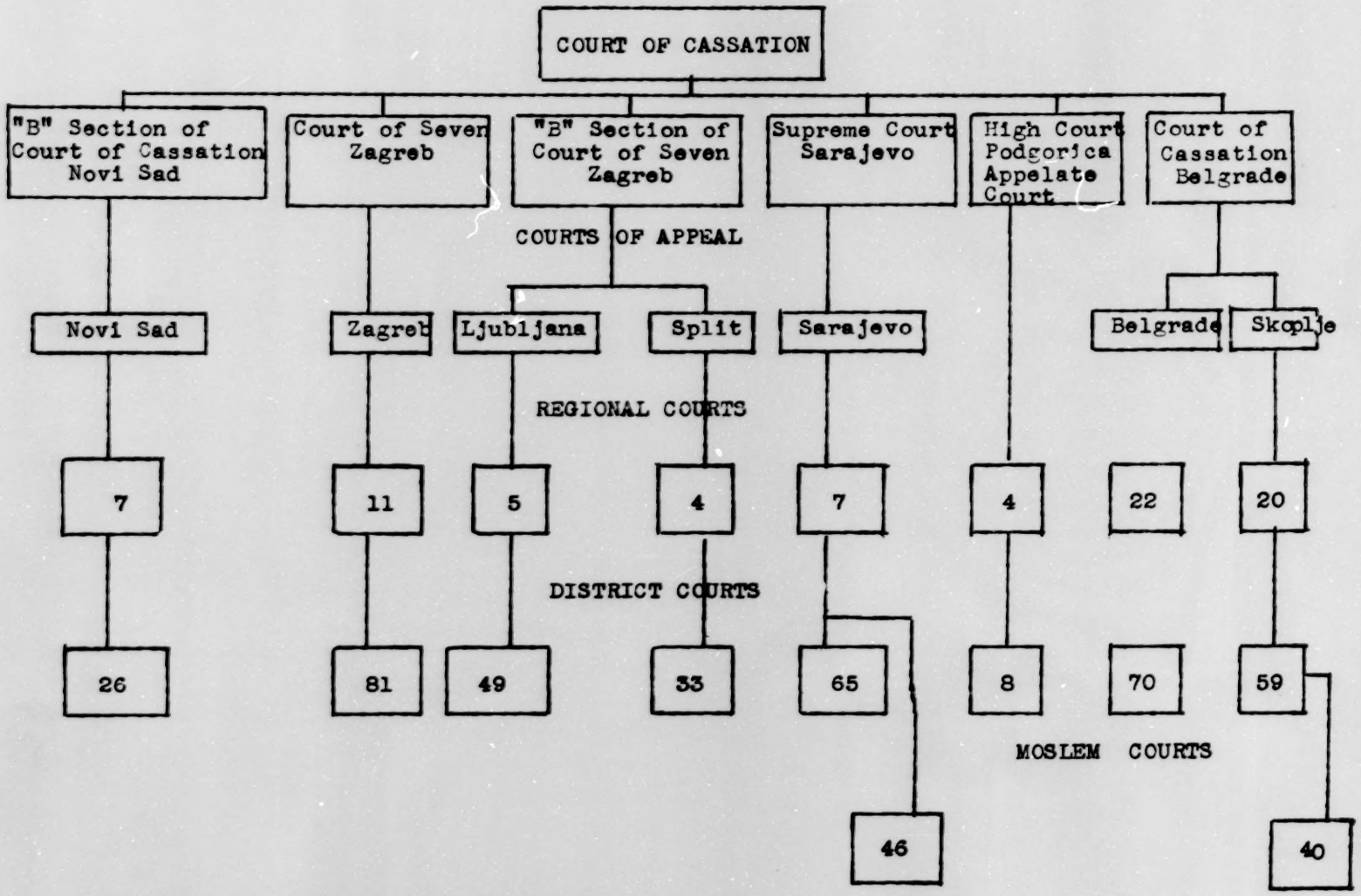
Nominally independent states: Montenegro has been resurrected virtually along the lines of 1914. Counting on a handful of Montenegrin royalists and on an old dynastic connection (Victor Emanuel married the daughter of the last

Figure 3. LOCAL GOVERNMENT :
Commune & County



Voters elect Communal Council and Commune Mayor. Mayor appoints minor officials.
King, on the advice of the Minister of Interior, appoints Nachelnik and srez officials.

Figure 4. JUDICIARY



The numbers indicate the number of courts of each category in each area.

Montenegrin ruler), Italy has tried to create a puppet state, with a Parliament and a Cabinet. The Italians, however, have been largely eliminated by the Montenegrin Chetniks. The Italians actually offered the royal crown to the son of King Nicholas, the last Montenegrin ruler, but he rejected it. 95/

Serbia, the "political vacuum", as the Nazis refer to the Belgrade government, exists only with the help of German occupation troops, who are being partially replaced by Bulgarian and Hungarian divisions. The premier is Milan Nedich, former Minister of War. He attempted to form an army of his own, but except for a few gendarmes and policemen, he has failed to attract many Serbs. In Belgrade there is also a Holy Synod, supreme governing body of the Orthodox Church, presumably composed of men willing to collaborate with the Axis.

Croatia is a "convenience" state. By deeding Bosnia, Herzegovina and Slavonia (preponderantly Serbian territories)/to Croatia, Hitler has saddled it with the unpleasant task of policing unwilling subjects, thus ensuring hostility between Serbs and Croats. Croatia has its own army for the most part comprising Ustashi terrorists. This army, however, is incapable of maintaining the fascist regime unaided and the poglavnik (leader), Ante Pavelich, has been forced on several occasions to seek Italian or German aid. Croatia has a Sabor (diet) and a ministerial council. The Minister of Foreign Affairs is Ivan Lorkovich, while General Slavko Kvaternik is Minister of War. On the whole, Croatia has more independence than the other Yugoslav regions, even though great portions of it are still under Chetnik control. 96/

In order to bind the Croatian state closer to her, Italy has sought to impose the Duke of Spoleto upon the Croats as their king. Although the coronation ceremonies were carried out in Rome, the "king" himself has never ventured to come to Croatia, which remains a kingdom without a king.

29. Political parties*

a. Dominant Political Parties

Before the German invasion there were six important political parties--each has representatives in the Yugoslav government-in-exile at the present time. The names, composition, support, strength, and leaders of these parties are as follows:

Democratic Party. A pre-1918 Serbian party, which was generally in opposition to the government before the coup d'etat of March 27, 1941. Its policy was collaboration with the Croats and the democratization of Yugoslavia. The party has a large number of adherents, especially since its chief rival, the Yugoslav Radical Union, has now been discredited. The leader of the Democratic Party was Ljuba Davidovich, who died several years ago. Two of its leaders in exile are Milan Grol and Bozhidar Markovich, both of whom hold posts in the present government in London. The party is pro-British, pro-American, and sympathetic toward Russia, as the largest Slav nation. It opposes totalitarian forms of government.

Croatian Peasant Party. Almost 90 per cent of the Croats voted for it in the last election in 1938. It is a powerful, homogeneous party, founded by the late Stjepan Radich and regarded by the Croats as their "national movement"; it stands for an integrated federal system of government for Yugoslavia. Its present head is Vlatko Machek, now under German surveillance. Two of the party's leaders, Ivan Subashich, former Ban of Croatia, and Dr. Juraj Krnjevich, general secretary, are now abroad. Dr. Krnjevich is a member of the present government in London, and Subashich, one of the most ardent partisans of the Yugoslav cause, has been lecturing in the United States.

*Except where otherwise noted, the statements in the following pages are based upon private information of the author.

The Peasant Party is anti-fascist, pro-British and pro-American. It sympathizes with the Russians in their struggle against the Germans.

Yugoslav Radical Party. This is the oldest of the Serbian parties. Prior to the coup d'etat it was an opposition party. It suffered from internal dissension, one faction being led by Milan Stojadinovich, who created the Yugoslav Radical Union. The party is democratic, but it has apparently outlived its usefulness. Its leader abroad is Misha Trifunovich, Minister of Education in the present Yugoslav government. The extent of the collaboration of the leaders of this party with the present government in London is uncertain. There are indications that this party has shown more inclination toward "Great Serbianism" than toward "Yugoslavism," the policy of the present Yugoslav government. The Yugoslav Radical Party has nothing in common, however, with the policy of the Quisling Nedich.

Agrarian Party. This party is less liberal than the present Democratic Party. While it opposes Communism, it is nevertheless sympathetic toward Soviet Russia and its achievements. It holds that Yugoslavia, being a peasant nation, should first solve the peasant problem. The party advocated the democratization of Yugoslavia and welcomed the Serbo-Croat understanding of 1939. When Soviet Russia was recognized in 1939, Milan Gavrilovich, one of its leaders, became Minister to Moscow. Another of its leaders, Chubrilovich, held a cabinet post in the Cvetkovich Government but resigned in protest when the latter signed the treaty with the Axis. At present both are members of the Yugoslav government. The party is pro-British, pro-American, and pro-Russian. Its membership

is probably increasing in Yugoslavia.

Independent Democratic Party. This party represents Yugoslavs in the former Austro-Hungarian territories. It was allied with the Croatian Peasant Party, and favored federalism and democracy. It is pro-American, pro-British, and sympathetic toward Russia. Its leaders are Srdjan Budisavljevich, Sava Kosanovich, and Hinko Krizman. The former two are in the present government abroad. They are staunch defenders of Yugoslav unity and are strongly pro-American. Both are liberals. Krizman, a Croat, unfortunately remained in Yugoslavia and is now in a Nazi concentration camp.

Yugoslav Radical Union. This party was founded in 1935 through the fusion of a part of the Radical Party and other Serbian elements with the Bosnian Moslem Party and the Slovene Clerical Party. The union, the mainstay of the reactionary Stojadinovich government, stood for a strong centralized government, but during the Cvetkovich regime this policy was abandoned, and steps toward federalism were taken by granting limited provincial autonomy to the Croats, on the eve of the second World War. With the signing of the Axis Pact, this party, which was chiefly responsible for the pact, was discredited. However, the Slovene Clerical Party, one of the parts of the Radical Union, was given two cabinet posts in the Simovich (coup d'etat) government because it was the sole organized political expression of the Slovene people, and the new government required national unity.

Bosnian Moslem Party. Its founder, Mehmed Spaho, died only a few years ago. Its new leader, Kulenovich, has pursued his predecessor's opportunist policy by supporting every government in power. Today, Bosnia and

Herzegovina being part of Croatia, Kulenovich is in the Pavelich puppet government and is therefore opposed to the United States. In 1938 his party represented a majority of the Moslems of Bosnia and Herzegovina (about one million). There have been reports of a Moslem revolutionary organization fighting by the side of the Yugoslav Chetniks.

The Slovene People's Party. Its main leader was Fath Koroshec, who died two years ago. Like the Moslem Party, it always supported the government in power. The coup d'e government reserved two cabinet posts for this party. Kulenovac, one of these ministers, was killed during the war. Snoj, the other, is in the present government-in-exile. Krek, another member of this party, has recently been added to this government. While this party still represents the majority of the Slovenes, it nevertheless has been constantly losing ground to the more liberal elements.

b. Minor Parties

Yugoslav Popular Movement, or "Zbor". This party was very weak. It is extremely nationalistic and advocates a corporate state. Its leader is Dimitrije Ljotich, now cooperating with the Nedich Government. It is hostile to the United States and to the United Nations.

Yugoslav Socialist Party. Like most European Socialist Parties, this party is anti-Hitler and hence pro-Ally. Its leader was Zhivko Topalovich. Its strengt however, is difficult to determine because it was driven underground by former Yugoslav governments.

Yugoslav Communist Party. In the early post-war years the Communist Party had considerable strength, and managed to win the municipal election in Belgrade in 1920.

But it was suppressed soon thereafter, and its present strength cannot be determined. The great majority of the Yugoslavs are pro-Russian, because of Slavic kinship, and they may become easy converts to Communism, because of their admiration for everything Russian. There are Communist leaders in Yugoslavia and it has been reported that the Communists have a government and a battalion of their own troops somewhere in Montenegro. There are Communist exiles from each of the peoples of Yugoslavia active in Moscow.

Ante Pavelich's group. The so-called Ustashi (Rebels) developed out of the Croatian extreme nationalist group of Frankovci (late nineteenth century). They were weak in numbers, but were supported financially and trained in revolutionary tactics by the governments desiring Yugoslavia's destruction-- Italy, Hungary, and Germany. They were a terrorist organization led by Ante Pavelich, who was once a deputy in the Skupshtina. In 1929 he escaped abroad. In April 1941, Pavelich hastened the collapse of the Yugoslav army by proclaiming an independent Croatia. The Ustashi took control of the country with Italian and German backing. The Pavelich regime is imposed upon the Croats, the majority of whom are Yugoslav in feeling and democratic in outlook.

IMRO, or the so-called Internal Macedonian Revolutionar Organization, was supposed to represent the free Macedonian movement, but instead it rapidly degenerated into a fascist tool aimed at Yugoslavia's destruction. Bulgaria used it for advancing its claims on Macedonia. Italy, Germany, and Hungary supplied IMRO with money and training. The assassin of King Alexander was one of its members.

1320 Fascist collaboration and terrorism were resented by many

"free" Macedonians, who wanted a free Macedonia in a free Yugoslavia, or free Balkans. These latter are at present collaborating with other anti-fascist groups in Yugoslavia while IMRO is still under Bulgarian or fascist control. The leader of IMRO, Ivan Mihailov, is seeking support in both Zagreb and Sofia.

The Croatian Nationalists were led by General Sarkotich. This group hoped for a Habsburg restoration that would unite Austria, Hungary, and Croatia, but the Anschluss deprived them of their program.97/ The group probably represents a few dispossessed large landowners and former Croatian officers in the Austro-Hungarian armed services. The former suffered by the Yugoslav land reforms, and the fall of the Hapsburgs deprived the latter of their military positions and prestige. The party is unimportant.

Conclusion. It is estimated that about 90 per cent of the Yugoslavs favor the United States. Possibly 5 per cent more are admirers of the United States, but belong to some separatist group, and only about 5 per cent are outright fascists and opposed to the United States.

Croatian Question. While the Croats want a federalized Yugoslavia, in which Croatia would have an autonomous government, the majority does not desire a separate Croatia. The real leaders of the Croats are either in exile or in the concentration camps -- Machek, Koshutich, Krnjevich, Subashich. All the Croatian leaders in exile, including their Communist leaders in Russia, advocate the re-establishment of a united Yugoslavia, differing only as to the form of government.

Macedonian Question. This has been generally over-emphasized by the enemies of Yugoslavia. The Macedonians are one of the South Slav peoples, neither Bulgarians nor

Serbs, although their history and culture are inseparable from those of Serbia and Bulgaria. The language is a dialect of Serbian and Bulgarian. How many Macedonians there are no one can tell, for there are no accurate statistics concerning them. The existing statistics are mere estimates set forth to justify the claims of one side or the other. It is estimated that there are about 550,000 Macedonians in Yugoslavia.98/ Economically and geographically, because of the unity of the Morava-Vardar valley, the Macedonians are a component part of Yugoslavia. Ethnically and linguistically they are a separate Yugoslav people. The majority of the Macedonians favor the United Nations, and many of them are at present in the ranks of Mihailovich's Chetniks.

30. Foreign policy and international relations

After the death of King Alexander (October, 1934), Yugoslavia gradually abandoned its traditional pro-French and pro-English orientation. The agreements with Rumania and Czechoslovakia (the Little Entente, formed in 1920-21) and with Greece, Rumania and Turkey (Balkan Pact of 1934) gradually began to lose their strength. The Anglo-French appeasement policy, evident when the Yugoslavs accused Hungary and Italy of complicity in Alexander's assassination, and afterwards, culminating in the betrayal of Czechoslovakia, caused Yugoslavia to abandon France and England for Germany and Italy. This was not a complete shift, but a gradual and definite reorientation. The new policy, however, was not in accord with the desires of the people.

The foreign policy of Yugoslavia before the coup d'etat was one of preserving the status quo. Although Yugoslavia had claims against Italy in Istria it never-the-

less was ready to forego them for the sake of peace. On the other hand, the Italian dreams of mare nostrum envisaged the annexation of Dalmatia and the economic domination of Yugoslavia. The German Drang nach Osten could not be reconciled with the Yugoslav status quo policy. Furthermore, the Hungarian aspiration for the former "crownlands of St. Stephen," including Croatia, Slavonia and Vojvodina (all three predominantly Yugoslav) conflicted with the Yugoslav peace policy. The Bulgarian claims on Macedonia were intended to create the Greater Bulgaria of the Treaty of San Stefano, which had been improvised by Russia in 1878 for reasons of political expediency.

To understand the Yugoslav attitude one must remember the following: a) they (especially the Serbs) fought on the side of the Allies from 1914 to 1918; b) like their allies they benefited by the peace treaties, and wished to defend them; and c) they are keenly aware of their Slavic kinship with the Poles, the Czechs and the Russians. These basic principles best explain the coup d'etat of March 27, 1941 and the overthrow of the pro-fascist government.

As things stand today, Yugoslavia is at war with all its neighbors except Greece. Rumania apparently is the only Axis power that did not advance claims against Yugoslavia.

The present policy of the Yugoslav leaders can be summarized as follows: a) defeat of the Axis; b) restoration of Yugoslavia, with the Slovenes and the Croats of Istria included; c) Balkan cooperation, with the Greco-Yugoslav Union Agreement (concluded January, 1942) to serve as nucleus for a future Balkan confederation; d) a free

Yugoslavia in a free Europe in a free World; e) American, rather than British and Russian, assistance in post-war reconstruction.

Section V.

ECONOMIC

31. General

a. Summary. Yugoslavia is preponderantly an agricultural country. It has exported grain of all kinds, especially corn and wheat, chiefly from the fertile valleys of the north, which are cultivated by modern methods. On small land-holdings in the rocky southern regions where primitive methods of cultivation obtain, the agriculture is of a subsistence type.

Livestock breeding is another important aspect of Yugoslav economic life. Cattle, sheep, goats and poultry are raised throughout the country, but exports are chiefly from the north. The meat packing industry is important.

Yugoslavia is rich in forests, and exports a considerable amount of timber, principally from the Vrbaska, Dravska and Savska Banovinas. There is also a local saw-milling industry.

The country abounds in fresh and salt water fish. The fishing industry is centered in the coastal regions of the Savska, Moravska and Zetska Banovinas, and along the Danube.

Though the mineral wealth is great, and the country is potentially one of the leading mining countries of Europe, development has been slow. The most important mining products are: coal, (inferior quality), iron, copper, lead, zinc, manganese, chrome, bauxite, antimony, pyrites, and salt, and in smaller quantities: magnesite, marble, asphalt, petroleum, natural gas, gold, mercury, and other minerals. Oil has been found in several regions of Yugoslavia, but together with other deposits, was not exploited extensively before the German occupation.

The railways of Yugoslavia are most developed in the northern more productive regions, and least extensive in the

Primorska, Zetska, Vrbaska, and Drinska Banovinas. The railways are for the most part State-owned. The Simplon-Orient and Orient International Expresses run through Yugoslavia; trunk lines connect it with all neighboring states. In general, however, the equipment is antiquated, and a large percentage of the network is narrow-gauge.

Roads are generally poor, with second rate surfaces, and difficult in wet weather. The Yugoslav section of the International Highway from Vienna and Budapest to Sofia, Athens, and Istanbul, was practically completed on the eve of the present war.

Internal communications were developed slowly but international connections were good. There were four radio broadcasting and several radio-telegraph stations. A cable ran between the Dalmatian coast and Tunis.

Sewage and water installations, except in the larger cities, are primitive. Water power for generating electricity is abundant but not fully exploited. The larger cities have electric lighting, tramways and other utilities, but there are many smaller cities without electricity.

Important food industries include flour milling, sugar manufacturing, distilling, vegetable oil refining, and meat packing. The textile industry produces artificial silk, natural silk, hemp and flax goods. The iron industry is confined to small iron and steel products. The leather industry is not fully developed, and raw hides are exported. The Bata shoe factory at Zagreb was one of the largest in Europe.

The paper industry had good prospects for future development and was already exporting cardboard and cartons Glass and ceramics were only beginning in Yugoslavia but cement was exported to all parts of the world. The chemical

industry was represented by soda, ferrosilicate, fertilizer, sulphuric acid, gas, pharmaceutical, cosmetic, soap, candle, dye and explosives factories.

Economic development under the "New Order". Nazi policy in relation to the several Yugoslav territories is to transform them into complimentary parts of the German "Lebensraum". This means intensive development of Yugoslav agriculture and exploitation of its mineral resources, much of which were hitherto untouched. New financial and economic institutions have already been set up.

"Independent" Croatia is somewhat better defined territorially than other parts of former Yugoslavia. It has even been able to conclude separate commercial agreements with its Axis allies. Most exports from Croatia in the past were minerals, ores, chemicals, lumber, wine, poultry, eggs, fruit, and tobacco. Most of the imports from Axis lands consisted of agricultural and other types of machinery, breeding animals, oil, gasoline, cotton goods, artificial silk, tools, instruments, and pharmaceutical goods.

Although the Serbian state is reported to enjoy some sort of local autonomy, its economic life, centering around the production of corn, livestock and fruit, is thoroughly dominated by Germany. Serbia has some of the largest copper, lead and zinc deposits of the former kingdom. Fish, olive-oil, and a considerable number of industrial products now have to be imported. The present shortage of food in the country has been attributed to destruction and removal by the Chetniks, as well as to German exploitation.

Other parts of former Yugoslavia fall into the economic systems of the countries which have absorbed them but not all of the latter have benefited greatly. Macedonia,

for instance, has been a liability rather than an asset to Bulgaria.

b. Agriculture. Yugoslavia is predominantly agricultural, with 80 per cent of the population directly engaged in agricultural activities.

The principal farming region is that formed by the basins of the Sava, Drava, and Danube rivers, which lie in the northern part of the kingdom. It is one of the most important grain-producing regions of Europe, and to Yugoslavia it is a vital area. 99/

According to statistics for 1938, 35,961,703 acres, or 58 per cent of the land was agriculturally productive. Forests covered about 31 per cent. The remainder was made up of built-over areas, waste lands, and bodies of water. 100/ The different cultures were distributed as follows: 101/

	Acres	
Tilled fields	18,660,950	51.91%
Gardens	371,932	1.00%
Meadows	4,549,833	12.66%
Pastures	10,816,125	30.09%
Vineyards	540,242	1.50%
Orchards	734,801	2.04%
Swamps*	287,820	0.80%
Total	35,961,703	100.00%

* Producing reeds.

The tilled fields were apportioned as follows

	Acres	
Cereals	15,278,737	81.88%
Industrial plants	461,553	2.47%
Truck crops	1,058,122	5,67%
Forage crops	879,384	4.71%
Fallow	983,154	5.27%
Total	18,660,950	100.00%

In general, agricultural methods are still primitive and unmechanized, although a few regions, almost all of which are in the north, employ modern methods of cultivation. 102/

Agricultural progress has been retarded by lack of capital, low prices for agricultural products, foreign com-

petition, and poor economic organization. Mechanization has been hindered by the lack of large areas of level land (except in the northern plain) and by the small size of the land holdings. Eighty six per cent of the population are peasants, 103/ of whom 96 per cent own their own land. 104/

Progress was being made in the last decade as a result of the influx of foreign capital, and of the increased market (especially in Germany) which called for an increased production of agricultural commodities and meats. Co-operative societies purchased some expensive machinery. 105/

Cereals form the most important crop, with large harvests of corn, wheat, barley, oats, and rye, in the order named. In addition meats, poultry and poultry products, fruits and vegetables are produced and exported.

Corn, used as food for man and beast, is the leading cereal in terms of quantity of production. In 1939 the harvest was 187,234,000 bushels, of which only 4,000,000 bushels were exported. The area of greatest production is the Dunavska Banovina. The Savska, Moravska, and Drinska Banovinas also produce large amounts of corn. 106/

In 1939 Yugoslavia was the second largest producer of corn in Europe, Rumania being first. 107/

Wheat. In 1939 Yugoslavia was the sixth largest producer of wheat in Europe. 108/ The Dunavska Banovina alone grows about 40 per cent of Yugoslavia's wheat. The Savska, Vardarska, Drinska and Moravska Banovinas also have large wheat areas. 109/ It is mostly winter wheat of excellent quality and weight, with a high protein and gluten content that makes it excellent for flour and for baking. 110/

Barley. The area planted in barley has been slowly decreasing. Both summer and winter barley are grown, chiefly in the Vardarska Banovina. 111/

Oats. In 1940 Yugoslavia produced oats largely for domestic consumption. 112/

Due to its large size, the following document has been filmed in segments. The order of the segments is as follows: left to right, top to bottom.

PROVISIONAL EDITION

FREE

YUGOSLAVIA
AGRICULTURAL PRODUCTION

0 25 50 75
Miles

AUSTRIA
HUNGARY
ITALY
RUMANIA
BULGARIA
ALBANIA
GREECE
ADRIATIC SEA
ITALY
ITALY

Ljubljana
Zagreb
Sisak
Fiume
Banjaluka
BELGRADE
Sarajevo
Shibenik
Split
Nish
Leskovac
Kotor
Shtip
TIRANA

14 15 16 17 18 19 20
46 45 44 43 42 41
18 19 20 21 22 23

LEGEND

Surplus producing region - wheat, corn, livestock

Subsistence farming - corn, wheat, pasture

Specialty crops - vineyards, fruits, wheat

MAP NO. 1067, OCTOBER 13, 1942

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Rye. The chief area of rye production is the Vardarska Banovina, which accounted for almost 50 per cent of the output in 1938. 113/ In 1939 approximately 65,000 bushels of rye out of a total harvest of 9,586,000 bushels were exported to Germany (including Austria) and Czechoslovakia. 114/

Other cereals are maslin, spelt, millet, rice, buckwheat and sorghum. The following table gives cereal crops and crop areas according to banovinas:

CEREALS: ACREAGE AND PRODUCTION[115/]

Banovina (Province)	Corn		Wheat		Barley		Oats		Rye	
	Acres	Bu. a/	Acres	Bu. b/	Acres	Bu. c/	Acres	Bu. d/	Acres	Bu. e/
Dravska 1938	110,155	2,469,406	159,048	2,711,832	46,484	967,980	54,308	1,615,622	85,188	1,404,244
Drinska "	905,809	21,149,695	576,988	9,262,209	81,634	1,414,306	155,626	3,715,441	15,360	223,690
Dunavska "	2,372,575	87,705,566	2,185,805	58,096,515	91,054	3,208,876	78,375	3,065,642	20,695	476,670
Moravska "	941,730	13,504,796	513,382	9,272,725	75,059	1,381,273	91,281	1,446,438	49,657	674,023
Primorska "	142,782	2,062,650	83,050	1,322,623	150,909	2,696,141	17,828	430,204	19,899	316,158
Savska "	1,189,589	37,263,281	791,157	16,132,748	124,274	2,787,095	142,735	4,868,953	96,626	1,634,024
Vardarska "	438,333	5,860,177	597,063	8,318,594	268,131	4,070,832	127,096	1,917,324	282,591	3,319,995
Vrbaska "	668,870	13,781,882	262,294	3,959,189	68,331	953,962	181,616	4,330,778	31,982	469,371
Zetska "	240,371	2,952,402	148,132	1,974,125	139,102	1,856,631	68,039	1,080,698	37,851	422,232
Belgrade "	11,367	480,292	10,996	280,538	348	11,156	376	24,678	5	173
National Total 1938	7,021,581	187,230,148	5,327,916	111,331,096	1,049,004	19,348,253	917,280	22,495,778	639,853	8,940,581
National Total 1939	6,902,827	159,267,990	5,584,467	105,660,184	1,045,698	19,484,411	915,051	23,993,047	649,863	9,536,157
National Total 1940 (Jan.-Sept)		172,439,479	5,471,041	70,910,539	1,035,821	17,351,812	883,990	21,001,741		8,395,658

a/ Bushel of corn = 56 lbs.
b/ Bushel of wheat = 60 lbs.
c/ Bushel of barley = 48 lbs.
d/ Bushel of oats = 32 lbs.
e/ Bushel of rye = 56 lbs.

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Industrial plants. There has been a great increase in the production of industrial plants in the last decade, due largely to German demands, especially for oil-producing crops

Hemp, one of the most important industrial crops, is raised in the Dunavska and the Savska Banovinas. There is a surplus for export. 116/

Tobacco was one of the principal sources of revenue for the state. It was raised chiefly in the Vardarska, Zetska, and Primorska Banovinas. 117/

Other industrial plants are sugar beets, hops, flax, cotton, poppy seed, sesame, soya beans, chicory, aniseed, pyrethrum, and sunflowers. 118/ Yugoslavia was important as a producer of opium, with an output of 49,209 lbs. in 1940. 119/ Most of the opium-producing area is now in Bulgarian hands. Other medicinal plants are also grown in great variety.

Production of Industrial Plants 120/

	Hemp		Tobacco	
	Acres	Tons	Acres	Tons
1938	142,913	58,957	42,565	16,200
1939	144,961	58,974	46,793	16,971

	Sugar beets		Sunflowers	
	Acres	Tons	Acres	Tons
1938	72,662	699,746	47,950	3,174
1939	102,393	827,161	48,474	3,008

Enough hay is produced for domestic needs. 121/ The tota forage crop area in 1939 was 891,688 acres, divided among hay, vetch, mangels, turnips, and gourds. 122/

Truck crops. In 1939, 666,103 acres were planted to potatoes, with a production of 1,512,590 tons. Cabbage and beans are also grown in large quantities. Other foods of which there is an export surplus are peas, lentils, carrots, cantaloupes, watermelons, garlic, onions, tomatoes, and peppers, produced mostly in the Dunavska, Savska and Dravska Banovinas. 123/

Fruits. In 1939 Yugoslavia produced 1,348,000 tons of plums, 301,000 tons of apples, 140,000 tons of pears, and 522,000 tons of grapes, chiefly in the Dunavska and Primorska Banovinas. 124/ Cherries, peaches, apricots, quinces, chestnuts, figs, lemons, oranges, olives and almonds are also raised. The area in fruit trees in 1939 was about 17,000 acres. 125/ Yugoslavia is an important producer of olive oil, having more than 4,000,000 olive trees in 1940. 126/

Livestock. Yugoslavia exported large amounts of meat and dairy products before the war, although domestic per capita consumption was low. 127/ The Dunavska and Savska Banovinas are the principal producers of meat and meat products. 128/

Livestock in Yugoslavia (1939) 129/

	Head		
Sheep	10,153,798	Horses	1,273,359
Cattle	4,224,595	Donkeys & mules.	142,546
Hogs	3,503,454	Buffalo	38,004
Goats	1,866,141	Poultry	22,453,730

Poultry and poultry products are also important. Eggs have been exported in increasing quantities each year. 130/ In 1939 the production of eggs was 110,000.000 dozen, of which 20,000,000 dozen were exported. 131/

Hides. There is a large yield of hides, but as the leather industry is undeveloped, most of the hides are exported. 132/

Lamb skins exported in 1938 totaled 1,500 tons, and cow and calf hides 1,220 tons. Most of this tonnage went to Hungary, Germany, Czechoslovakia and Poland. 133/

Wool. The wool produced is coarse and suitable only for blankets and peasant clothing. The estimated production in 1938 was 29,762,100 lbs., of which 2,222,257 lbs. were exported to Germany, Albania and Switzerland. 134/ The coarse wool produced in Yugoslavia does not meet all domestic needs,

1320

and there is some importation of wool and wool products.

Agricultural situation in 1940-41. Data on production in 1940 are incomplete. A poor wheat crop caused a bread shortage by the end of the year,135/ and the cotton crop, while larger than before, was estimated at only 6,814 bales, or about 5 per cent of the country's needs. 136/ The plum crop was also a disappointment, as many of the trees were killed during the winter, and the crop was only 3,300 tons, while in 1939 it had been 82,700 tons. 137/ On the other hand, the dry bean crop was large--165,000 tons. 138/ The production of oil seeds, however, continued small, in spite of efforts to encourage the expansion of this culture, and Yugoslavia continued to import vegetable oils. 139/ The output of wool, olive oil, and various other products was smaller in 1940 than during most recent years. 140/

In all probability, Germany is now trying to increase food production as much as possible, for her own benefit. A German firm has started building a $1,175,000 slaughtering and meat-packing plant near Belgrade - the first foreign meat-packing enterprise in Yugoslavia. 141/

The first report of the Economic Institute in Zagreb on economic conditions in the newly-established Croatian state was issued in November 1941. This report gave the amount of arable land in Croatia as 14,027,000 acres which was roughly sub-divided as follows:

Nature of land	Acres	Percentage of total
Plowed land	7,413,000	52.0
Truck gardens	173,000	1.2
Cultivated meadows	2,224,000	15.7
Pasturage	3,706,500	27.0
Vineyards	180,400	1.3
Orchards	229,800	1.6
Swamps and morasses	56,800	0.4
	13,983,500	99.2

In addition there were approximately 2,471,000 acres of forest.

A considerable part of the plowed land, or about 2,500,00 acres, was under corn; 1,630,000 acres were under wheat, and 450,000 acres under barley. The remainder of the grain land was devoted to oats, rye, millet and buckwheat.

Only 7.3 head of cattle and 5 pigs per square mile were listed. 142/

In the newly formed state of Serbia the crop prospects in the summer of 1941 appeared favorable. It was believed that the following crops would be harvested in the summer of 1942:

Corn	2	million tons
Wheat	1.5	million tons
Barley	230	thousand tons

In these grains, and in sugar, hemp, and oil seeds, the production was expected to exceed domestic needs. Serbia also had 26 million plum trees, over 3 million apple trees, and 1,600,000 pear trees. 143/

c. Minerals.

Before the German invasion, mining was not highly developed, but after agriculture it was the country's most important economic activity. Yugoslavia lacked sufficient domestic capital to exploit its mineral and other resources; nevertheless a strong nationalist group opposed the use of foreign capital. (For the list of Yugoslav mines with their location, see Appendix [illegible], Table 1).

Coal. Both in quantity and value, coal ranks first among the products of the mining industry of Yugoslavia. Brown coal is most abundant with bituminous coal next. Yugoslavia has no anthracite. There are coal deposits in all sections of the country. The reserves are considerable, a large number of seams not yet having been touched. The greatest center of coal production is in the Dravska Banovina. The principal reserves are in the Drinska and

PROVISIONAL EDITION

FREE

YUGOSLAVIA

MINING AND MANUFACTURING

0 25 50 75
Miles

AUSTRIA
HUNGARY
ITALY
ROMANIA
BULGARIA
GREECE
ALBANIA
ADRIATIC SEA

Dravograd
Maribor
Jesenice
Kranj
Ljubljana
Celje
Litija
Zagreb
Kochevje
Karlovac
Caprag
Sushak
Osijek
Subotica
Petrovgrad
Novi Sad
Vrshac
Brod
Banjaluka
Tuzla
Drvar
Jajce
Zenica
Krupan
Palanka
BELGRADE
Majdanpek
Bor
Zajechar
Srebrenica
Sarajevo
Livno
Prozor
Mostar
Shibenik
Split
Kragujevac
Kraljevo
Nish
Pirot
Trepcha
Leskovac
Dubrovnik
Kotor
Bar
Ulcinj
Kratovo
Skoplje
Prilep
TIRANA

LEGEND

MINERAL PRODUCTS

B BAUXITE
C COAL
Fe IRON
Pb LEAD
Zn ZINC
Cu COPPER
S SALT
Cr CHROME
Mn MANGANESE
O OIL
Hg MERCURY
Sb ANTIMONY
L LIMESTONE
Mg MAGNESITE

MANUFACTURING

1 CHEMICAL, INCLUDING CEMENT
2 METALLURGICAL
3 ELECTROCHEMICAL
4 FOOD PROCESSING
5 SUGAR REFINING
6 TEXTILE MFG.
7 PETROLEUM REFINING

GENERAL AREA WHERE MINING OCCURS

MAP NO. 1068 OCTOBER 12, 1942

REPRODUCED BY THE OSS REPRO. SECTION

DRAWN IN THE GEOGRAPHY DIVISION, O.S.S.

Vrbaska Banovinas. 144a/

The following table shows the regional distribution of the industry and the amount of the various types of coal produced in 1938. The figures, however, cover only mining under the supervision of the Ministry of Forests and Mines: 144b/

Coal Production (in tons), 1938

Mining District	Bituminous coal	Brown Coal	Lignite	Total
Belgrade	432,958	802,568	410,660	1,646,186
Ljubljana	- - -	1,784,683	151,796	1,936,479
Sarajevo	63,396	1,301,884	403,034	1,768,314
Zagreb	- - -	332,114	298,578	630,692
Skoplje	- - -	- - -	122,353	122,353
Split	- - -	213,615	- - -	213,615
Total,	496,354	4,434,864	1,386,421	6,317,639

Latest available figures for coal output are as follows: 145/

	1939 (First ten Months)	1940	
Brown Coal	4,280,333	5,241,877	tons
Lignite	1,166,063	1,471,804	tons

In spite of its domestic production, Yugoslavia imported a considerable quantity of coal. The imports consisted for the most part of coke, bituminous coal and anthracite. The native bituminous coal does not produce good coke for smelting purposes. 146/

Iron. Developed and probable ore reserves of the country are estimated at 220,000,000 tons, chiefly of hematite and limonite with some siderite. 147/

The richest iron deposits are the Ljubija and Varesh mines in the Drinska Banovina. There are also deposits in the Moravska and Vardarska Banovinas, and in the Petrova and

1920

Trgovska mountains in the Savska Banovina. There are smaller deposits in the Zetska Banovina, which have not been fully explored. 148/

Ore is extracted in two state mines at Varesh 25 miles north of Sarajevo, and Ljubija, 12 miles south of Prijedor. in Bosnia. It contains 28.56 per cent iron and 2-4 per cent manganese. Virtually all the ore is exported. 149/

Most of the pig-iron was used in local industry and only a small amount was exported. One of the chief obstacles to a greater production of pig-iron is the necessity for importing coke. 150/

The following table shows the regional distribution of iron production in 1938: 151/

Mining District	Iron Ore (tons)	Pig-iron (tons)
Belgrade	29,824	3,338
Ljubljana	365	- - -
Sarajevo	616,098	55,712
Zagreb	18,241	5,370
Skoplje	4,188	- - -
Total	668,786	64,420

During the first nine months of 1940, Yugoslavia's iron production was 67,486 tons. 152/

In 1935 arrangements were made with Krupp for the construction of large rolling-mills, armanent plants, and coke-ovens, and in 1938 a number of government-owned mines and foundries merged to form the Yugoslav Steel Co. 153/

Copper. There are deposits of this ore in almost every district. The largest and richest, as well as the most highly developed, are in the Moravska Banovina. The deposits in the Dravska Banovina have not been worked. In the Savska Banovina there are mines of mixed copper and iron ore at Ruda and in the Petrova and Trgovska mountains. There are also deposits in the Zetska, Drinska and Vrbaska Banovinas. The

1320

richest deposits of copper ore are in the Moravska Banovina, where the Bor and the Maidanpek mines were already in operation before the First World War. Besides these, about twenty-five concessions have been granted up to the present for various other mines. All turbines, pumps and crushing equipment at the Bor mines were reported demolished in June, 1941, and presumably production is still low. 154/

The greater part of the ore produced is exported, while a comparatively small part is smelted in the country. Most of the crude copper is also exported, as Yugoslavia has no refineries. A considerable quantity of finished and semi-finished copper products is imported. 155/

The following table shows the regional distribution of copper production in 1938, and production for the first ten months in 1939 and 1940: 156/

Period	Mining District	Copper Ore (Tons)	Metallic Copper (Tons)
1938	Belgrade	837,036	46,276
	Skoplje	2,761	____
	Entire Country	839,797	46,276
1939 (Jan. 1-Oct.31)	Entire Country	919,555	Blister Copper 38,732 Electrolytic Copper 11, 234 Total 49,966
1940 (Jan. 1-Oct.31)	Entire Country	848,849	Blister Copper 39,127 Electrolytic Copper 11,411 Total 50,538

Lead and Zinc. With the exception of Dunavska Banovina, lead and zinc are to be found throughout the whole country. The richest deposits are in the Moravska and Vardarska

Banovinas, one of the largest mines being at Trepcha. Zinc ore is for the most part exploited as a by-product of lead. The largest and richest deposits of zinc are in the Dravska Banovina. The greater part of the ore produced is smelted in Yugoslavia. The crude lead and zinc produced are for the most part used in local industry. 157/

The following table shows the production of lead and zinc in 1938, by regions, and production for the first ten months of 1939 and 1940: 158/

Period	Mining District	Lead and Zinc ore (Tons)	Refined Lead (Tons)	Crude Zinc and Zinc Dust (Tons)
1938	Belgrade	75,565	---	---
	Ljubljana	122,268	9,514	5,115
	Sarajevo	---	---	---
	Skoplje	275,117		
	Entire Country	472,950	9,522	5,115
1939 Entire Country (Jan. 1 to Oct 31)		638,166	9,383	4,511
1940 Entire Country (Jan. 1 to Oct. 31)		745,243	23,395	5,472

Another source gives the production of lead for the first 9 months of 1940 as 23,313 tons. 159/

Manganese and Chromium. Although Yugoslavia is said to have sufficient chromium reserves to lead the world, if the more important deposits were exploited, the production has been low. Both in quantity and quality the best chromium mines are in the Vardarska Banovina. The ore contains as much as 60 per cent chrome-protoxide. Chromium ore is also to be found in the Drinska, Vrbaska, and Moravska Banovinas. As there are no chromium smelters in Yugoslavia, the entire production of ore is exported. 160/

In 1939 manganese ore was obtained from an extensive new development, 30 to 35 miles south of Uzhice. Other manganese deposits are known, but in 1939 no work was being done on them. One of the largest is at Chevljanovich northeast of Sarajevo. 161/

The exploitation of chromite is confined largely to a single group of mines in the Ljuboten area northwest of Skoplje. 162/

The following table shows the production of chromium and manganese in 1938, by regions, and production for portions of 1939 and 1940. 163/

Period	Mining District	Chromium Ore (Tons)	Chromium Concentrates (Tons	Manganese (Tons)
	Belgrade	1,994		672
1938	Sarajevo	50		3,470
	Skoplje	62,391		
	Entire Country	64,435		4,142
1939 (Jan. 1 to Oct.31)	Entire Country	39,962	—	—
1940 (Jan. 1 to Sept. 30)	Entire Country	55,425	10,027	7,427

Bauxite. Yugoslavia is richly supplied with bauxite in the Drinska, Primorska, Savska, Dravska and Zetska Banovinas. In 1936 only the deposits in the Primorska Banovina had been exploited. Rich deposits of good quality ore were reported discovered in 1940 near the village of Thupa in the region of Nikshich in Montenegro, and plans were being

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made to develop them. 164/

The following table shows the production of bauxite in Yugoslavia in 1938, by regions; and prodution for the first ten months of 1939 and 1940: 165/

Period	Mining District	Bauxite (Tons)
1938	Ljubljana	1,168
	Sarajevo	253,307
	Split	193,343
	Entire Country	447,818
1939 (Jan. 1 to Sept. 30)	Entire Country	295,132
1940 (Jan. 1 to Sept. 30)	Entire Country	237,471

Other Minerals. The following table shows the production of certain other minerals for 1938, and for the first 9 months of 1939 and 1940. 166/

Mining district	(in tons) Antimony ore	Refined salt	Magnesite	Marble	Asphalt	(in ounces) Gold	Silver
Belgrade	16,841	-	8,117	10,210	-		
Ljubljana	-	-	-	-	-		
Sarajevo	-	58,003	-	-	-		
Zagreb	-	-	-	-	-		
Skoplje	-	-	9,186	-	-		
Split	-	-	-	-	162		
Total, 1938	16,841	58,003	17,303	10,210	162	85,927	2,769,326
Jan.-Sept., 1939	15,116	-	-	6,986	132	-	-
Jan.-Sept., 1940	19,891	-	-	4,875	145	-	-

Oil. Oil is found in a number of places in Yugoslavia. The most important deposits are in Medjumurje (in eastern Slovenia) and in Croatia (along the Sava and Drava rivers). A considerable amount of crude oil lies between 650 and 1000 feet below the surface. In a six-year period (1918-22) a total of only 386 tons of crude oil were obtained from the Medjumurje petroleum fields, located near Paklenica. 167/

In Croatia, oil is found at Mikleushka (in Moslavina), in the regions of Bachindol, Nova Gradishka, Petrovo Selo, Bujavica (near Lipik), at Prechec near Zagreb, Veliki Poganac near Ludbreg, and Ribnik. 168/

In Slovenia an oil deposit is reported to have been discovered at Peklenica, district of Chakovec. 169/

In Bosnia oil is found at the foot of Mt. Razhanj, near Tuzla. In Montenegro there is oil at Bukovik and Sirdeni. The oil sources in South Serbia, at Ohrid and Buchin, were expected by the Yugoslavs to be of great future industrial value. This is especially true regarding the Ohrid region, where the oil fields are of considerable size and had attracted many domestic and foreign capitalists.

Before the war there were at least fifteen companies exploiting Yugoslav oil resources. 170/

According to the statistics for the year 1938, Yugoslav produced 1,202 tons of oil (206 tons in the Sarajevo Mining District, and 996 tons in the Zagreb District). During the first nine months of 1940 the output of crude oil was 899 tons, as compared to 923 tons for the same period in 1939. 172

Although no information is available concerning oil production since the Nazi conquest, it has probably increased greatly, as the oil resources were believed to be large. As early as 1939, German interests were securing oil concession and were apparently preparing for extensive development of the fields. 173/

Natural gas. Yugoslavia is also rich in natural gas, which is usually found in the same localities as the oil deposits. Gas was exploited at Bujavica and at Sisak, both in Croatia. The Bujavica gas is found in large quantities, and is of high quality methane (933 B.t.u. per cu. ft.). The chief reason why it was not extracted more extensively was the lack of a market. 174/ In 1938 Yugoslavia produced 85,434,118 cu. ft. of natural gas. 175/

d. Forestry. The total wooded area amounts to 19,223,82(acres, or about a third of the total area of the country. 176/ Full-grown forests cover 62 per cent of this area, whereas 25 per cent of the total is half-grown forest. The latter supplies the rural population with firewood and light building material. The most heavily wooded banovinas are the Savska, Vardarska, Zetska and Drinska. The available lumber not only meets the needs of the country but also leaves a considerable surplus for export. 177/

The greater part of the Yugoslav forests is composed of deciduous trees: 16.81 per cent of the total is oak forest, 23.70 per cent beech, and 34.17 per cent mixed deciduous trees with beech predominating. About 11 per cent of the forest is coniferous, 178/ and 14.40 per cent is of mixed deciduous and coniferous trees. 179/

In 1936, 47 per cent of the forests were owned by the state and 19 per cent by communes, while 34 per cent were privately owned. Inasmuch as large forested estates were expropriated under the agrarian reform, the communal forests have probably increased greatly since 1936. 180/

Thanks to the large quantities of mature timber and the excellent quality of the wood (Slavonian oak, the pine and spruce of Slovenia, Bosnian pine and the beech of Gorski Kotar), the lumber industry has progressed wherever there has been adequate means of transport. The soft wood industry is centered in Bosnia and Slovenia, and the hard wood industry in Slavonia.

In Bosnia in 1936 there were 122 sawmills with water power, 73 steam sawmills and 6 electric mills. In Slovenia there were 275 modern sawmills and 1,677 of a primitive type. In Croatia and Slavonia there were about 150 small and 100 large sawmills, some with 8 to 16 saws, while in Bosnia half of the total lumber production was concentrated in four large enterprises: Shipad, Krivaja, Ugar and Nashichka. The wood-working industry (furniture, crates, flooring, window-frames, doors, matches, boxes, tamin, cellulose, paper, etc.) was small in comparison with the large number of sawmills. Considerable quantities of wood products were therefore imported, notably paper, furniture, small wood articles, crates, cellophane, and the like. 181/

In 1938 Yugoslavia exported 888,024 tons of lumber, chiefly to Italy and Germany, and 5,704 tons of wood products, chiefly to England. 182/

The following table shows the quantity of wood exports for the first nine months of 1940, as compared to the first nine months of 1939: 183/

Type of Production	January-September, 1939 (in tons)	January-September, 1940 (in tons)
Firewood	62,297	211,625
Building lumber	785,163	921,863
Railway ties	34,116	20,574
Wood products	5,197	6,105
Charcoal	22,170	16,757
Total	908,943	1,177,695

It was estimated in 1936 that the average per capita consumption of wood in Yugoslavia was 423.7 board feet annually, i.e., a total of about 5.93 billion board feet a year. From 850 million to 1.7 billion board feet were exported annually. Felling amounted annually to about 7.65 billion board feet, being slightly higher than the afforestation, which was estimated at about 6.36 billion board feet. 184/

e. Fisheries. The Adriatic waters abound in a variety of fish and shellfish, which, together with fresh-water fish, are an important item in the diet of the country. In 1938, there were 21,105 maritime fishermen, of whom 2,715 depended entirely upon this work for their livelihood. There were 6,544 fishing boats in the Adriatic, with a combined tonnage of 13,860. The total maritime catch for that year was 17,671,533 lbs., much more than half of which (11,722,950 lbs.) consisted of migratory fish; the catch of mollusks and crustaceous varieties totaled 829,726 lbs. 185/ The chief migratory fish were sardines, tunny, mackerel, anchovy and bonito. 186/

In 1938 the country exported 2,243,981 lbs. of the maritime catch. Of the total maritime catch, 1,009,518 lbs. were canned and 2,978,133 salted. 187/

Because of the shortage of tin and of suitable oil, the Dalmatian canneries produced in 1940 only 30 per cent of their normal output of about 40,000 cases. According to a report of December, 1940, a complete shut-down seemed likely in 1941, 188/ but it is not known whether this shut-down actually occurred.

The chief river fish are sturgeon, sterlet, pike, carp, perch, trout, som (a kind of catfish) and sandre (related to the perch). Among the varieties of sturgeon is the marun (600 to 1,000 lbs.), the largest fresh-water fish in Europe. The som scales up to 300-400 lbs. 189/

Large quantities of fish are caught in the Yugoslav portions of lakes Skadar, Ohrid, Prespa, and Dojran. Trout and carp are among the principal lake fish.

The annual freshwater catch in 1935 has been estimated as totaling 15,500,000 lbs., made up as follows: river fish 6,500,000 lbs.; lake fish, 4,500,000 lbs.; fish from stocked ponds, 4,500,000 lbs. 190/

In addition to sea and fresh-water fishing there is oyster-growing in the Bay of Mali Ston, sponge fishing near Shibenik and coral fishing at Zlarin, near Shibenik. 191/

32. Manufacturing (see also Appendix D on cities)

Extent of development. Although Yugoslavia has an abundance of mineral resources and certain other raw materials, a potential abundance of hydro-electric power, and a large supply of labor (still very largely unskilled), manufacturing is still in its infancy. Lack of the necessary capital and economic organization have retarded development. Only 2 per cent of the population are factory workers. The inadequacy of manufacturing is shown by the fact that manufactured articles constitute 75 per cent of the total imports and only 10 per cent of the exports. There is, however, a great deal of handicraft and home production of simple necessities, including the spinning and weaving of cloth for clothing. 192/

Location. About three-fourths of the factories and works were located in the northern part of Yugoslavia in the banovinas of the Drava, the Sava, and the Danube. The following table shows the location of factories and works by banovinas on December 31, 1936: 193/

Banovina	Stone	Metallurgy	Metals	Ceramics Glass	Wood	Paper and printing	Chemicals	Food	Textiles	Leather and skins	Electricity	Others	Total
Dravska	10	14	48	40	174	32	46	118	94	50	113	2	741
Drinska	2	5	11	11	76	4	8	52	12	4	49	2	236
Dunavska	12	1	48	50	52	15	24	490	108	18	102	1	921
Primorska	13	2	3	12	6	1	3	63	11	4	48	-	152
Savska	12	3	40	54	6	4	16	57	4	-	24	1	135
Vardarska	1	-	6	9	157	16	60	291	89	19	101	5	847
Vrbaska	1	2	2	6	23	-	11	55	18	3	27	1	136
Zetska	-	-	-	4	14	-	7	13	2	2	23	1	85
Belgrade	5	-	41	15	23	23	30	54	49	10	21	3	271
Total	58	28	205	203	538	99	205	1,221	387	110	525	15	3,594

The outstanding industrial regions are Novi Sad, Belgrad Zagreb, and Ljubljana. Other centers are Maribor, Kranj, Leskovac and Zemun. The following table shows the number of industrial enterprises on December 31, 1938, by industrial regions, and the total number of industrial enterprises on January 1, 1940.

Industrial Enterprises[194]

Industry	January 1, 1940	December 31, 1938											
			Industrial Regions										
	Total	Total	Ljubljana	Zagreb	Osijek	Sarajevo	Novi Sad	Banja Luka	Belgrade	Split	Dubrovnik	Podgorica	Skoplje
Total	3,254	3,455	414	793	161	215	710	55	690	179	24	42	172
Agricultural and food products	906	935	40	116	68	30	304	5	229	62	9	11	61
Wood	405	443	82	148	18	72	21	17	46	7	-	18	7
Mining	(?)	145	5	49	1	13	1	9	33	26	-	2	6
Metallurgy	125	199	45	34	6	10	44	1	47	1	-	-	11
Chemical	188	213	36	72	8	8	21	3	39	9	5	-	12
Leather	91	96	29	22	3	2	10	-	29	-	-	-	1
Textile	417	424	85	95	15	17	123	3	67	4	-	-	15
Paper and printing	84	105	19	41	5	1	9	-	22	4	-	-	4
Electrical	271	252	10	30	16	30	55	10	40	17	8	10	26
Building	422	471	40	115	19	23	110	5	93	41	2	1	22
Others	139	172	23	71	2	2	12	2	45	8	-	-	7

Nature of manufacturing. The principal types of manufactures are lumber, textiles, flour, leather and leather goods, chemicals, beer and sugar. 195/ The most highly developed field is the food industry, particularly flour milling; 40 per cent of flour produced suffices for domestic needs. 196/

1320

The principal centers of the forestry industry are in Slovenia, Bosnia, Slavonia, and Croatia. The capacity of the saw mills (about 2,150 in number) was estimated at 4,237 to 5,084 million board feet in 1936, of which a fifth was available for export. 197/

The Direction of Monopolies had tobacco factories, located at Nish, Sarajevo, Ljubljana, Mostar, Travnik, Banja Luka, Zagreb and Senj. 198/

The principal industrial cities and towns are the following:

Belgrade is the center of a varied group of industries that manufacture primarily agricultural and food products.

There are several airplane factories in Belgrade: "Jasenica" (whose specialty is spark plugs), and "Rogozarski" both assemble planes; "Vlajkovich" produces motors. One other airplane factory, "Rakovica," was also reported. 199/

The "Mikron Co.," which employs 100 skilled workers and makes aircraft instruments and precision parts for machine guns, was recently reported to be working on a $536,760 contract. "Teleoptic" and "Nestor" also make aircraft instruments. 200/

The "First Yugoslav Company" manufactures telephones, optical and precision instruments and batteries. An aluminum plant, "Hromalu," produces aluminum hydrate, oxide, and sulphate. There is also the "Chemical Industry of Belgrade," and the "Kontinental-Kauchuk" which makes rubber products. The "Obilich Co." has a steel mill in Belgrade. 201/

Bela Crkva (Dunavska Banovina). There are two petroleum storage tanks with a capacity of 26,400 gallons. 202/

Borosevac has a nitrogen plant, constructed for the government by a German firm, with a capacity of about 2,870 tons per year. 203/

Bosanski Brod (Vrbaska Banovina). A Socony-Vacuum refinery here has a capacity of 110,000 tons per year. 204/

Brdjani. Five petroleum storage tanks have a combined capacity of 1,850,000 gallons. 205/

Caprag (Savska Banovina). A Shell Company plant is reported to have a capacity of 77,000 tons of petroleum. 206/

Celje (Dravska Banovina). At nearby Gaberje apparently there is a plant that makes airplane parts. 208/

Chukarica (Belgrade Prefecture). The petroleum storage capacity is 50 tons. 209/

Dravograd (Dravska Banovina) has an oil refinery. 210/

Indjija (Dunavska Banovina) has a parachute factory. 211/

Jajce (Vrbaska Banovina). A chemical plant, using the falls of the Pliva river (9,200 hp.), had two electrochemical departments in 1935. One department produced 28,000 tons of caustic soda and about 25,000 tons of chloral derivatives and liquid chlorine, while the other produced some 20,000 tons of calcium carbide, and about 66,000 tons of ferrosilicate and ferromanganese. The major portion of the products was exported. 212/

Jasenice (Dravska Banovina). The rolling mills here have a total capacity of 220,000 tons. 213/ In 1936 they produced rolled and drawn wire, iron bars, cold drawn steel for carriage and wagon wheels, forged pieces, railway material, plates, nails and other articles. 214/

Kamnik (Dravska Banovina) has a government operated rifle powder factory. 215/

Kraljevo (Moravska Banovina). The State airplane factory is located here. 216/ Railway cars are also built here. 217/ Three tanks storing 39,627 gallons of petroleum are available. 218/

Kragujevac (Dunavska Banovina). The largest munitions

plant in Yugoslavia is the State-owned establishment at Kragujevac. It manufactures gun carriages and gun mounts, artillery and infantry ammunition, small arms, rifles, and chemical warfare munitions. 219/

Kranj (Dravska Banovina). The Yugo-Chehka textile factory near Kranj was converted into an airplane factory in August, 1941. 220/

Krushevac (Moravska Banovina) has a railway car factory. 221/

Lopatnica. There are 5 petroleum storage tanks that have a combined capacity of 1,850,000 gallons. 222/

Lozovac, near Shibenik (Primorska Banovina). An aluminum plant here is producing at full capacity for the Italian armament industry. 223/ A petroleum storage tank had a capacity of 522,638 gallons. 224/

Lukavac (Drinska Banovina). The chemical plant here had in 1935 a capacity of 82,700 tons of ammoniac soda, one-fifth of which was converted into caustic and crystal soda and about 2,000 tons into soda-bicarbonate. Only a tenth of the output was needed for domestic consumption. Brine is piped from the salt deposits of nearby Tuzla. 225/

Mahichno, near Karlovac (Savska Banovina). A private factory has a daily output of about 11 tons of explosives. 226/

Maribor (Dravska Banovina) has important food, chemical and metal industries. Explosives and various types of iron and steel products are manufactured. 227/

Mokro Polje, near Kraljevo (Moravska Banovina). An aircraft factory builds airplanes and parts. 228/

Mostar (Primorska Banovina). Here 79,250 gallons of petroleum can be stored in 6 tanks. 229/

Novi Sad (Dunavska Banovina) is the export center for food and industrial products for northern Yugoslavia—principally grain and oil seeds. Hemp is carded here before export. 230/

Obilichevo, near Krushevac (Moravska Banovina), has a government-operated factory producing rifle powder. 231/ It was damaged by the Germans.

Osijek (Savska Banovina). There was a refinery here, on the Drava river. The Shell Oil Co. had a storage capacity of 33.6 tons at Osijek, and the Ipoil Co. had a storage capacity of 8,960 tons. 232/ Among other industries Osijek also has a steel plant. 233/

Ravne (Dravska Banovina). In 1935 two furnaces were reported with a daily capacity of 66 tons and an annual production of 16,500 tons. Crude steel was produced, and articles such as wagon springs, axles, and a special steel for export were made. 234/

Ravnjak has a factory for the manufacture of mustard gas, phosgene, and muriatic acid. 235/

Rushe (Dravska Banovina) had in 1935 a calcium cianamide factory with a capacity (apparently annual) of 22,000 tons. 236/

Sarajevo (Drinska Banovina). The "Avia" airplane

factory and a railway car plant are located here. 237/ A petroleum storage tank here has a capacity of 145,830 gallons. 238/ The headquarters of the government-controlle "Jugoslavenski Chelik" (Yugoslav Steel) has been here since August 19, 1938. This company was to control the State-owned steel mills at Zenica, the Ljubija iron mines, the Varosh iron mine and iron foundries, and the Zenica and Breza coal mines. 239/

Slavonski Brod (Savska Banovina). The largest railway car factory in Yugoslavia is located here. In 1939 it began producing light locomotives for use on narrow-gauge lines, but its capacity does not exceed 50 locomotives a year. The car manufacturing capacity is 150 cars per year. 240/

Skoplje (Vardarska Banovina) has 10 petroleum tanks with a combined capacity of 132,000 gallons, and another tan with a capacity of 31,700 gallons. 241/ Skoplje is a food and livestock center.

Smederevo (Dunavska Banovina) has a new oil refinery, 242/ and two petroleum storage tanks with a capacity of 1,320,900 gallons. 243/ Smederevo also has a railway car factory, and facilities for repairing locomotives and river boats, and for the construction of steel bridge members. 244/

Smederevska Palanka (Dunavska Banovina) has a factory ("Jasenica") for the construction of railroad cars. 245/

Split (Primorska Banovina). This is a great center of cement production, and in recent years the output has increased greatly. 246/

Store (Dravska Banovina). A furnace had in 1935 a daily capacity of 66 tons and an annual production of 16,500 tons of iron. Rolled pieces, mainly bars and steel

wheels, were produced. 247/

Sushak (Savska Banovina) is important as a lumber market. 248/

At Tezno (south of Maribor) a Junkers airplane factory was reported. 249/

Tivat (Zetska Banovina). Here there are 4 tanks with a storage capacity of 58,100 gallons of petroleum, and 26,400 gallons can be stored in lighters. There are further storage facilities for 396,000 gallons. 250/

Topushko (Savska Banovina). The blast furnace here uses charcoal; it is owned by a private company. This furnace and one at Beslinac have a combined daily capacity of 33 tons of pig iron. 251/

Varesh (Drinska Banovina). Here there are two state-owned blast furnaces producing pig iron. One furnace has a capacity of 132 tons daily and the other 33 tons. They are operated with imported coke. The annual production of 33,000 tons was to be increased to 55,000 tons. 252/ Cast iron foundries, producing pipes and other articles, had an output of 4,200 tons in 1936. 253/

Vitanovac. Five petroleum storage tanks have a capacity of 1,850,000 gallons. 254/

Volinja. There are two petroleum storage tanks with a combined capacity of 1,320,000 gallons. 255/

Vrdnik (Savska Banovina). Two petroleum storage tanks have a storage capacity of 1,320,000 gallons. 256/

Zagreb (capital of Banovina of Croatia) was the commercial, industrial and banking center of northwestern Yugoslavia. Its flour-mills and other food-preparing industries, oil refineries, paper mills, and breweries, supply local and outside markets. 257/

There are petroleum storage facilities for about 950 tons, 10 tanks with a capacity of 132,000 gallons, and an

explosives manufacturing plant. 258/

Zemun (Prefecture of Belgrade) has two airplane factories—"Zmaj", which manufactures hydroplanes, and the "Ikarus Co.," which assembles land planes. The latter factory is near the railway station. 259/ In November, 1941, the "Wiener Neustadt" Aircraft Company advertised for 200 tinsmiths for Zemun, so it may have taken over either the "Ikarus" or "Zmaj " works. 260/ Ten tanks storing 132,000 gallons of petroleum are available. 261/

Zenica (Drinska Banovina). Three open-hearth furnaces, with a capacity of 16.5, 19.8, and 24.3 tons per day, as well as small rolling mills, are operated by the state-owned "Industrija Gvozhdja". 262/ The Zenica Iron Works produced rolled and forged iron bars, drawn wire, rails for narrow-gauge railways and other products. 263/ Plans made in 1941 called for an expenditure of at least 100,000,000 dinars ($2,982,000) for the erection of 5 blast furnaces and acid open-hearth furnaces, and for the extension of the electric power plant at Zenica, and for a large foundry to be erected between Sarajevo and Podlugovo. These additions would have given Yugoslavia a steel center adequate in size to supply most of the manufactured steel products required for agriculture, transportation and construction. 264/

33. Utilities

Electric Power. In keeping with the undeveloped state of industry and the general backwardness of Yugoslav economy, the power industry utilized only a fraction of the potential resources. The minimum potential resources for generating hydroelectric power were estimated in 1938 at 3,474,633 h.p., of which 216,944, or about 6 per cent, were utilized. 265/

The principal rivers suitable for generating electric energy are the Sava, Drava, Mura, Krka, Cetina, Neretva, Trebishnica, Una, Drina, Morava, Vardar, and their tributaries. One must also mention the Danube which, in the Djerdap sector, could if need be, furnish immense supplies of energy. 266/

The largest electric plants were built either in the manufacturing regions or in those with abundant sources of raw materials which required cheap electric power for processing. There were steam power plants in all the larger cities in regions with inadequate water power (Vojvodina, Serbia) and in regions with ample coal supplies (Bosnia). The most important steam power-plants are in the following larger cities: Belgrade, Zagreb, Varazhdin, Apatin, Sremska Mitrovica, Novi Sad, Petrograd, Vrshac, Velika Kikinda, Zemun, Kragujevac, Stari Bechej, Shabac, Veliko Gradisht etc. The hydro-power plants are for the most part in Slovenia, Croatia, Bosnia, and Dalmatia. The largest among these are located at Fala on the Drava river; Kraljevac, near Omish; Manojlovac (Dalmatia); Jaruga (Dalmatia); Jajce; Ozalj; near Karlovac; Tetovo; Zeleni Vir, near Skrad; Sarajevo; Banja Luka; Travnik; Valjevo; Uzhice; Nish; Leskovac; Ovchar and Kablar; Chachak; and Kraljevo. The capacity of most of these electric plants could be increased. 267/

Due to its large size, the following document has been filmed in segments. The order of the segments is as follows: left to right, top to bottom.

PROVISIONAL EDITION

RESTRICTED

YUGOSLAVIA: ELECTRICAL POWER GENERATION AND TRANSMISSION

OVER 1000 H. P. UNDER 1000 H. P.

Ⓗ ⓗ HYDRO-ELECTRIC POWER PLANTS

Ⓣ ⓣ THERMAL ELECTRIC POWER PLANTS

Ⓤ ⓤ TYPE UNKNOWN

TRANSMISSION LINE

(Based On Incomplete Data) (Positions Are Approximate)

MAP NO. 1981 JANUARY 26, 1943

COMPILED AND DRAWN IN THE BRANCH OF RESEARCH AND ANALYSIS, OSS

In 1934 the largest hydroelectric plants were the ones operated by the Dalmatian chemical works on the Cetina, a river near Zadvorje (50,000 h.p.) and the Fala plant on the Drava, serving Maribor (30,000 h.p.). 268a/

The utilization of electric power in 1934, when the total capacity was about 200,000 h.p., was distributed as follows: industry, 50 per cent, lighting 41 per cent, engineering and chemical enterprises 7 per cent, agriculture 2 per cent. 268b/

The following table shows location, number, type and capacity of power plants: 269/

Power Stations	Diesel Stations		Gas Stations		Water Stations		Mixed Stations		Total	
Banovina	No.	Capacity kW.	No.	Cap. kw.	No.	Cap. kw.	No.	Cap. kw.	Total No.	Total Cap. kw.
Dravska	72	29,400	15	898	127	49,498	35	29,276	249	109,072
Drinska	45	17,135	5	759	3	152	5	936	63	26,484
Dunavska	27	25,191	25	8995	19	1682	--	--	30	15,939	101	51,856
Moravska	37	20,709	9	587	8	927	3	453	8	19,002	65	41,678
Primorska	2	2,920	13	941	3	121	6	90,760	3	7,765	27	102,507
Savska	72	51,500	38	4122	13	527	8	2,145	23	9,294	154	67,587
Vardarska	7	683	6	1758	4	114	9	7,441	7	3,070	33	13,066
Vrbaska	18	5,285	3	132	4	240	6	8,210	4	1,632	35	15,496
Zetska	6	14,500	15	3718	2	120	4	802	2	267	29	19,406
Belgrade	20	41,339	11	2418	-	--	-	---	3	2,216	34	45,973
Total	306	208,658	140	24,327	563	883	168	160,211	5	12096,013	790	493,126

Of the 912,575,000 kw. hours produced by 790 plants in 1937, almost half was produced in two banovinas--Primorska and Dravska. The same two banovinas have the largest number of power plants, as is shown in the table above.

Of the total number of power plants, 300 were publicly owned, 419 were private property, and 71 were owned "jointly" (apparently by combined public and private interests). 270/ The following table shows the production and consumption of electric energy in 1937 by banovinas (in thousands of k.w. hours): 271/

	Power Use*			
Banovina	Private & Domestic	Street Lighting	Motors, etc.	Power Production*
Dravska	14,007	2,115	247,219	283,603
Drinska	6,861	1,817	30,361	43,158
Dunavska	9,338	3,186	38,247	56,509
Moravska	4,075	954	45,086	57,801
Primorska	5,837	1,172	166,807	197,552
Savska	17,734	3,784	58,929	91,339
Vardarska	2,518	1,025	5,104	9,928
Vrbaska	1,904	443	59,115	65,234
Zetska	1,673	518	31,021	35,512
Beograd	10,425	4,773	49,861	71,938
Total	74,375	19,787	731,748	912,575

* The excess of production over use is due to waste in transmission.

The total power resources of the new Croatian state are estimated at about 450,000 h.p., 40 per cent of this being in Dalmatia, 38 per cent in Croatia and Slavonia, and 21 per cent in Bosnia-Herzegovina. The production of electricity in Croatia is the most important industry in value of output. 272/

Recent information on individual power plants is lacking. A plant on the Trebishnjica river was under construction in 1938; it was believed to be large enough to supply the entire surrounding region. Electrification of three of the most important islands off the Dalmatian coast--Brach, Hvar, and Vis---was reported in June, 1940. A power station for the electrification of the Crikvenica--Zagreb railway was built near Crikvenica in 1941. 273/

For data on the electric power resources of some of the principal cities in 1939/40, see Appendix A, Table 2.

1320

15°E

AUSTRIA

HUNGARY

ITALY

SAVA BANOVINA

Gossdorfa
Neudorfa
Gor. Radgona
Morska Sobota
Lendava
Dravograd
Slovenjgradec
Mežica
Maribor
Fala
Ljutomer
Peklenica
Ptuj
Ormoz
Čakovec
Varaždin
Bistrica
Topolšica
Velenje
Dobrna
Cornji Grad
Podlog
Zabukovca
Celje
Laško
Trbovlje
Zagorje
Litlja
Vintgar
Zavaršnica
Tržić
Bohinj
Čimžar
Kranj
Kamnik
Škofja Loka
Čsenj
Crnuče
Žiri
LJUBLJANA
Vrhnika
Grosuplje
Zagradec
Cerknica
Ribnica
Kočevje
Novobor
Novo Mesto
Toplice
Metlika
Črnomelj
Ožalj
Senovo
Št. Janž
Breziče

46° N

0 5 10 15 20 25
MILES

0 5 10 15 20 25
KILOMETERS

(Scales And Coordinates Are Approximate)

YUGOSLAVIA:

ELECTRICAL POWER GENERATION AND TRANSMISSION IN DRAVA BANOVINA

(H) HYDROELECTRIC POWER PLANTS

(T) THERMAL ELECTRIC POWER PLANTS

• TRANSFORMERS

—— TRANSMISSION LINES

------ PROJECTED TRANSMISSION LINES

Data, September 1938

15°E

MAP NO. 1982 JANUARY 27, 1943

COMPILED AND DRAWN IN THE BRANCH OF RESEARCH AND ANALYSIS, OSS

A report issued in 1939 states: "The German VDE-code has been adopted as the standard for the electrical industry. Accordingly, the electric current is supplied in the form of alternating three-phase current of 220/380 volts, 50 cycles, small installations being fed over two wires (one phase and a neutral) having a voltage of 220 volts, while the larger installations are supplied with 3-phase current of 380 volts.

"There exist several old distributing networks operating at 110 v., 50 or 42 cycles. A frequency of 42 is to be found only in old plants and these networks are expected shortly to be changed to meet the standards, i.e. 220/380 volts and 50 cycles. Direct current, except in very special cases such as in mines, is almost nonexistent." 274/

Gas works. In 1935 the country's gas plant produced 530 million cubic feet of gas, utilizing 6,500 carloads of imported gas coke. The natural gas resources are reported to be extensive but the only two pockets exploited, up to 1935, were at Bujavica and Sisak. 275/

The 14 gas plants in 1935 were located as follows: Bjelovar, Celje, Koprivnica, Ljubljana, Maribor, Novi Sad, Osijek, Panchevo, Sarajevo, Slavonski Brod, Split, Subotica, Vinkovci and Zagreb. It is noteworthy that Serbia had no gas plant. The Zagreb plant produced gas for domestic and industrial purposes, coal gas, tar, ammonium sulphate and benzol. 276/

Refrigeration. In 1934 more than 100 plants produced ice, though in many, such as breweries, it was a secondary product. The following cities had ice plants in 1934:

Dravska Banovina: Ljubljana (2), Maribor, Novomesto.

Drinska Banovina: Lukovac (Tuzla), Chachak, Tuzla, Valjevo, Sarajevo.

Dunavska Banovina: Ruma, Sekich, Senta, Smederevo, Sombor, Srbobran, Sremska Mitrovica, Stari Bechej, Stari Vrbas, Subotica (2), Odzhaci, Titel, Velika Kikinda, Veliki Bechkerek (2), Veliko Gradishte, Vrshac (2), Apatin, Bachka Palanka (2), Bachki Brestovac, Bajmok, Gajdobra, Indjija, Kragujevac (3), Mladenovac, Novi Sad (4).

Moravska Banovina: Nish (2), Jagodina, Pozharevac, Zajechar.

Primorska Banovina: Shibenik (2), Split, Hvar, Komizha, Omish.

Savska Banovina: Valpovo Trg, Varazhdin, Virovitica, Vukovar, Zagreb (3), Rab, Nashice, Nova Gradishka, Ogulin (3), Aleksandrovo, Crikvenica, Daruvar, Djurdjevac, Osijek (3 Karlovac, Koprivnica, Krizhevci.

Vardarska Banovina: Prilep (2), Leskovac (2), Prizren, Skoplje (3), Shtip, Tetovo, Veles.

Vrbaska Banovina: Delibashino Selo (Banja Luka), Dubrovnik (Zetska), Komolac (Dubrovnik), Kotor, Plevlje (2), Kosovska Mitrovica.

Belgrade Prefecture: Belgrade (6), Panchevo (2), Zemun. 277/

Water Supply. In northern Yugoslavia and in all the major river valleys, drinking water is abundant and relatively safe. Only the large cities have modern supply systems, while many towns and villages still depend on public wells and fountains.

The Karst regions of southern and western Yugoslavia have very little water, especially in the summer. Cities in these areas use cisterns: many villages, however, are dependent on distant water sources.

Sewage. All the large cities in Yugoslavia and some of the towns in the northwest part of the country have relatively adequate sewage systems. For the most part, however, towns and villages have no sewage disposal facilities at all, except for streams and rivers.

34. Railroads.

In 1938 the railway net comprised 6,591 miles, of which about 70 per cent was standard gauge. Employees numbered 80,806. There were 1,950 stations, and headquarters were maintained at Belgrade, Zagreb, Ljubljana, Sarajevo and Subotica.

The railway lines were classified according to gauge as follows: 278/

4 ft. 8½ in.	4,555 miles	(of which 372 were double-track)
3 ft. 3 3/8 in.	113 "	
2 ft. 6 in.	1,677 "	
1 ft. 11 5/8 in.	246 "	

The line from Trieste to Belgrade is double-tracked, except (according to the map published in 1938) between Zidani-Most and Novska. The only other double-tracked line is between Trieste and the former Austrian frontier, near Maribor. Most of the narrow gauge lines were in the mountainous west central part of the country.

In 1938, 6,000 miles of the railways were operated by the General Administration of State Railways, and 592 miles by the Ministry of Forests and Mines or by private owners. 279/

At the end of 1938 there were 2,403 locomotives on the railways of Yugoslavia. 280/ In 1936, latest year for which such data are available, the motive power was classified as follows:

Type of line	Number of Coupled Axles 281/ 2	3	4	5	6
Standard	38	1,273	222	103	45
Narrow gauge	53	203	214	5	96
Private	15	20	35	15	3

Until 1929 the largest locomotives were 1,000 h.p. The loaded weight seldom exceeded 15 tons per axle, because most railroad lines and bridges could not have carried greater weight. In 1929, however, a few 1,700 h.p.

locomotives were introduced -- for example, on the Sushak - Srpske Moravice line. 282/ Since then more of that type have been put into service -- how many is not known.

On December 31, 1938, the rolling stock consisted of 5,340 passenger cars and 55,707 freight cars. 283/ In 1936 the rolling stock of the railways under the General Administration of State Railways was divided as follows: 284/

Gauge	Rolling-Stock	Number of units	Number of axles
Standard	Locomotives	1,603	
	Passenger cars	4,143	9,481
	Freight cars	42,062	84,503
2 ft. 6 in.	Locomotives	551	
	Passenger cars	909	3,019
	Freight cars	10,704	36,966
1 ft. 11 5/8 in.	Locomotives	155	
	Passenger cars	78	312
	Freight cars	936	3,744

Traffic in 1938 is shown in the following table: 285/

Unit	State Railroads	Private Railroads
Passengers	56,165,688	3,166,280
Passenger miles	1,873,841,410	3,259,399
Baggage, ton-miles	825,489	6,722
Freight cars, loaded	1,756,401	
Freight, tons	22,883,278	1,430,705
Freight, ton-miles	2,905,277,387	49,909,818

Rail net. The railways of Yugoslavia are very unevenly distributed. In the territories long under Habsburg rule (Slovenia, Croatia, Slavonia) they form a net comparable in density to those of Central and Western Europe. But the central and southern parts of the country lack a rail net in the proper sense of the word, the railways here consisting of separate lines, several of them narrow-gauge, connecting with each other at rare intervals.

The main west-east trunk line runs from Rakek on the pre-1941 Italian border through Ljubljana, Zagreb and Vinkovci to Belgrade. This line is double-tracked from Rakek to Zidani Most (73 miles) and from Novska to Belgrade (190 miles), while between Zagreb and Novska (73 miles), there are alternate single-track lines. The western end

of this line (Rakek to Zidani Most) is part of the main north-south line from Vienna to Trieste which enters from Yugoslav territory north of Maribor. Another line of international importance is the Budapest-Fiume line which crosses the main east-west line at Zagreb. Vinkovci is [illegible] important junctions on the main line where connections are made for Hungary and Rumania. Before the present war the Simplon-Orient Express ran over this main line, the Bucharest section being detached at Vinkovci.

There are two principal north-south lines, one in the west and one in the east. The western line is of domestic importance only and may be thought of as a branch from the Zagreb-Fiume line; it branches off near Ogulin and extends south to the port of Split on the Adriatic. Of greater importance is the main line south from Belgrade up the Morava valley, over the watershed, and down the Vardar to Salonika. This line provided Yugoslavia with an outlet to the Aegean and was the route of the Simplon-Orient Express. At Nish an important branch leads southeast to Sofia and Istanbul.

The mountainous interior (Bosnia and Herzegovina) is served by several narrow-gauge lines. The most important are the north-south line from Brod on the main east-west line (between Novska and Vinkovci) to Sarajevo, Dubrovnik and Zelenika (on the Gulf of Kotor) and the east-west line from Kruševac (terminus of a short branch from the main line between Belgrade and Nish) to Sarajevo.

The maximum capacities have been reported for only a few of the lines as follows:

Belgrade-Nish	36	trains a day, each Way.
Belgrade-Velika Plana	72	" " " " "
Lapovo-K.Mitrovica-Skoplje	18	" " " " "
Nish-Skoplje	18	" " " " "
Skoplje-Veles	24	" " " " "
Veles-Djevdjelia	16	" " " " "
Veles-Bitolj	9	" " " " "

1320

A full list of Yugoslav railway lines with their capacities in axle kilometers is shown in Table No. 3 in Appendix A. 286/

35. Roads

Prior to the war, the roads in Yugoslavia were being constantly improved. Large sums were allotted each year for road building and repair work. When completed, the Yugoslav road system was expected to be adequate for the military needs of the country, but early in 1936 it was still considered inadequate. 287/

In 1938 the length of the national and local banovinal roads totalled 25,987 miles (national roads 6,360 miles). Only somewhat over half of the total, or 16,220 miles, were considered fit for motor traffic. 288/

Type of roads. The primary roads are generally two-lane, second-rate macadam, with a base of large broken stone covered with one or two layers of crushed rock, with maximum gradients of 6 to 10 per cent in mountainous regions. 288a/ There were a few relatively good main arteries, but they were far from having the strength of concrete roads and would not withstand the wear of heavy motor-columns for long. 289/

The secondary roads are generally earth surfaced, with a scattering of broken stone, passable in dry weather, but extremely difficult in wet weather or snow even with chains. 290/

Heavy traffic would quickly cut them up beyond all hope of use. Two-way traffic is impossible on most of them at any time.

Macadam roads are economically built with relatively little cut and fill. Many are serpentine and narrow, and for the most part high crowned because of the mountainous nature of the country. Two-way traffic is possible only at reduced rates of speed. The surfacing is generally thin and would soon break under heavy traffic. 291/

Yugoslavia abounds in good road material, consequently road construction and maintenance may be undertaken at minimum cost. 292/

The following are the most important roads radiating from Belgrade:

1. Belgrade-Nish-Pirot-Bulgarian Frontier. This is a link of the main international road from Vienna and Budapest to Sofia, Varna, Istanbul, and Salonika and Athens. It is passable in all seasons, except after heavy snow. Sections of the road are, however very bad in wet weather, unless the new well-paved road has been completed. At Parachin there is a lateral road running northeast to the Rumanian frontier at Turnu Severin, via Zajechar and Negotin.

2. Belgrade-Nish-Veles-Skoplje-Bitolj-Greek frontier at Florina. This artery runs through the heart of Serbia, and has secondary links east and west to the Bulgarian and Albanian frontier regions. The route is passable in all seasons, except after heavy snow. Sections of it are bad in wet weather.

3. Belgrade-Kragujevac-Mitrovica-Pech-Podgorica-Cetinje-Kotor. This road covers the general route of the Belgrade-Adriatic railroad and reaches southwest Adriatic coast regions and North Albania. It is in good condition, many sections being of recent construction. Some sections are heavy going in wet weather. A branch extends from Podgorica to the Albanian frontier and Skodra (Scuttari).

4. Belgrade-Valjevo-Uzhice-Vishegrad-Sarajevo-Mostar-Metkovich-Dubrovnik. This road traverses central Bosnia and Herzegovina, reaching the Adriatic along the Neretva River canyon. It is one of the newly reconstructed roads and is in good condition. Mountainous sections are difficult after snow or during wet weather. A good road follows the coast, connecting Kotor and Dubrovnik.

5. Belgrade-Shabac-Zvornik-Tuzla-Banja Luka-Bihach-Senj-Sushak (Fiume): North Adriatic Coast. This highway traverses north Bosnia and central Croatia. A second-class road branches off from Banja Luka to Sarajevo, and another from Zvornik to Vlasenica and Sarajevo. The main coastal road from Metkovich to Sushak, via Split-Shibenik-Gospich to Otochac-Senj connects routes (4) and (5). An interior highway from Kozica-Sinj- nin-Grachac to Gospich parallels the coastal road. This section is of Austrian construction and generally requires only maintenance and bridge culvert repair.

Highway (5) is generally in good repair, except the Belgrade-Shabac section, which included unpaved portions in 1933 - heavy in wet weather. There are also some bad sections in Bosnia and in the regions of Doboj and Prijedor.

6. Belgrade-Zagreb-Novo Mesto-Ljubljana-Northwest frontier, via Sremska Mitrovica-Vinkovci-Brod-Novska. This road traverses the great central Sava valley region of Srem, Slavonia, and Croatia, paralleling the main railroad line from Belgrade to the northwest frontier. It has laterals from Zagreb southwest to Bosanki Novi and Banja Luka, connecting with route (5); and from Zagreb southwest to Senj and Sushak via Karlovac. These two sections are excellent units of the strategic military routes to the northwest frontier, connecting with the main route along the Dalmatian coast from Sushak to Kotor. There is also a northern section from Zagreb to Maribor, connecting routes (6) and (7).

Route (6) is one of the poorest main routes of Yugoslavia, having been given a low priority on reconstruction. Some sections are very bad in wet weather, especially in the regions from Brod to Vinkovci.

7. Belgrade-Sremska Mitrovica-Osijek-Maribor-Ljubljana along the northwest frontier. This road parallels highway

(6) and runs generally parallel to the Danube River as far as Osijek. It has numerous good laterals connecting with route (6) in Croatia. From Ljubljana it has two international connections, one north to Klagenfurt and Vienna, and one south to Fiume (Rijeka) and Trieste. From Osijek there is a lateral road north to Budapest via Mohacs.

This route has a number of rough sections as far as Osijek, and is very bad in wet weather, but beyond Osijek it is generally very good.

8. Belgrade-Szeged-northward to Hungarian frontier, via Novi Sad-Stari Bechej and Senta. This route parallels the line of the Tisza River.

9. Belgrade--Timishoara (Rumania), connecting via Panchevo-Vrshac and Denta. This route was made feasible/by the opening of the new railroad and highway bridge at Belgrade (King Alexander's Bridge) across the Danube and the new road bridge under construction over the Tamish River at Panchevo. It offers the only uninterrupted auto route from Rumania to Yugoslavia and serves as a valuable auxiliary to the recently completed rail link between Rumania and Yugoslavia. 295/

10. The International Highway. This runs between the Hungarian and Bulgarian frontiers, via Subotica - Novi Sad - Zemun-Belgrade-Kragujevac-Jagodina-Nish-Caribrod; length of Yugoslav section 332 miles. 294/

Considerable progress had been made on this road. By 1939 it was completed from the Hungarian border to Kragujevac and intermittantly between Nish and Caribrod. Paving includes stone, asphalt and concrete. The numerous under- and over-passes make for rapid traffic. It is the best road in Yugoslavia.295/

Automobiles and Busses. Automotive vehicles in 1940 were distributed as follows: 296/

		Per Cent Private	Per Cent U.S.Makes
Passenger (gasoline cars)	15,886	85	25
Busses (gasoline)	404	70	62
Busses (Diesel)	564	65	0
Trucks (gasoline)	1,462	65	52
Trucks (Diesel)	3,869	65	26
Total	22,185		
Motorcycles, pleasure and delivery three wheel cars.	11,643	60	3
Trailers	349	80	0

In 1940 there were about 360,000 bicycles in Yugoslavia, half of which were in Slovenia alone. 297/

Vehicles using draft-animals comprised 25,506 heavy duty carts, 825,384 rural carts, 53,974 carriages, and 22,014 two-wheeled carts for passengers. 298/

There were 356 interurban bus lines in 1938 with 622 busses, covering 11,100 miles. The busses had a total of 14,053 seats and transported 2,752,915 passengers. In addition there were 60 urban bus lines with 92 busses. 299/ Tire shortage had greatly curtailed bus service as early as December, 1940. 300/

In the Croatian Banovina (1939-1941), there were 316 busses operating on 182 bus lines and covering 5,024 miles of roads, or 1,806 miles more than the railroad mileage in the same area. 301/

Motor repairs and garage facilities. There is relatively little motor transportation, either commercial or military. Even before the war gasoline and oil prices were prohibitive, and upkeep and repair were difficult due to scarcity of motor mechanics, garages, and spare parts. 302/

In 1939 there were 29 large firms in the automobile business. Most of them sold automobiles and parts. It may be assumed that many had motor repair facilities.

Fourteen were in Belgrade, six in Ljubljana, five in Zagreb, two in Osijek, one in Novi Sad and one in Maribor. 303/

36. Shipping

a. Inland Shipping (See also Appendix on Principal River Ports)

Yugoslav inland waterways total some 1,243 miles including 373 miles along the Danube. Inland shipping employed about 10,000 workers in 1939. 304/

The four important navigable rivers are the Danube, Sava, Drava and Tisza and they have always been well used trade routes.

(1) Danube. The minimum depth at low water, 6 feet, is insufficient for the larger passenger steamers and barges, After leaving Golubac, the Danube enters a gorge 60 miles in length where navigation is difficult because of the swift current and numerous shallow places. In this gorge, known as the Iron Gates (Djerdap), improvements have been carried out between Moldava and Orshova in order to enable larger ships and barges to operate safely. Rock ledges have been removed and dikes constructed. Below Orshova a locomotive on the right bank is used to tow barges through the swift current. The Danube freezes during the winter and shipping is tied up between December and February, and often longer. Over eight million tons of freight are carried by the Danube annually. 304a/

There are 3 canals from the Danube which serve the Vojvodina grain fields. In the Banat of Yugoslavia, the King Peter Canal runs off from the Danube, connecting the river at Bezdan with the Tisza at Stari Bechej. The canal is 77 miles long, has 5 locks and 13 landing stages. The King Peter Canal has a feeder canal 29 miles long and 4 feet 8 inches deep. The Crown Prince Alexander, length 42.3 miles has four locks and six landing stages, connecting the King Peter Canal with the Danube at Novi Sad. The Bega Canal is approximately 46 miles long. It has 4 locks

and forms a communication channel between Veliki Bechkerek and Timishoara.

(2) Sava. This river is navigable from Belgrade to Sisak, about 369 miles. Its tributary, the Kupa, which enters the Sava at Sisak, is navigable for 85 miles. The Sava is the main water route through the heart of Yugoslavia and carries some 400,000 tons of freight yearly.

(3) Drava, This river forms the frontier between Yugoslavia and Hungary. At low water the river is navigable for 94 miles, from Darch to the mouth. At high water it is navigable for 143 miles.

(4) Tisza. The river enters Yugoslavia from Hungary and flows 102 miles into the Danube some distance east of Novi Sad. It is second in importance to the Sava. The Tisza is shallow and navigation is difficult at times. Sudden floods occur and much silt is carried down into the Danube.

Other navigable rivers and lakes. The Neretva and Zrmanja are navigable at their mouths for 13 and 9 miles, respectively. There are short navigable stretches on the Tamish (connected with Vrshac by a canal), Bosna and Una rivers. Lakes Skadar (Scutari) and Ohrid also have some shipping. 305/

Important river ports. The most important river port, particularly for imports, is Belgrade. On the eve of the present War a new port with modern facilities was under construction. The largest ports on the Danube and other rivers, according to their importance are as follows.

Belgrade, Panchevo, Bosanski Brod, Veliko Gradishte (with a stone quay) Veliki Bechkerek, Novi Sad, Osijek, Prahovo, Sisak, Senta, Titel, Zemun, Mitrovica, Kladovo and Bezdan. Virpazar on the Lake Scutari is also important.

There has been a tendency for certain ports to specialize in handling particular commodities. Thus, Panchevo on the Tamish (1½ miles from the Danube) normally ships almost all the grain exports from the Banat. Smaller ports on the Danube, and Tisa ship grain from the Bachka. The Slavonian oaks are shipped down the Sava and Drava and pyrites from Majdanpek are loaded at Donji Milanovac. Imported cement is unloaded at Bcochin, coal at Kostolac, and stones at Golubac. Copper and ores from Bor are exported from Prahovo which also receives imported coke. Timber is exported at Bolishcho and Shestilevac. The inland waterways are also used to transport sugar beets to the refineries at Veliki Bachkerek, Vrbas and Crvenka. 306/

River ships and barges. At the end of 1938 Yugoslavia possessed 114 tugs (44,854 combined hp.) 33 passenger ships (9,310 hp), 4 mixed passenger and cargo vessels (765 hp), 3 steam and motor ferries (84 hp), 22 steam and motor barges (4,413 hp), 305 light motor craft (5,378 hp), 577 iron barges, 353 wooden barges, and [illegible] long boats and lighters. / The total tonnage amounted to 485,164 tons. 307/

There were before the war three important shipping companies: Societe Royale Yougoslave de Navigation (J.R.P.), Societe Yougoslave de Navigation (S.Y.D.), and Schultz Simon.

The following table shows the quantity of goods imported and exported through the more important Yugoslav river ports in 1938. 308/

Port	Foreign Trade		Domestic Trade	
	Import (tons)	Export (tons)	Unloading (tons)	Loading (tons)
Total	479,650	709,331	2,463,843	1,413,907
		1. Danube		
Belgrade	106,734	7,682	953,839	72,138
Bcochin	21,436	-	3,705	164,611

Port	Import (tons)	Export (tons)	Unloading (tons)	Loading (tons)
Kostolac	-	1,345	177	153,890
Novi Sad	38,069	10,334	102,082	21,912
Osijek	24,058	8,203	24,062	6,412
Panchevo	6,407	33,631	76,332	15,173
Smederevo	31,949	101,740	97,930	9,301
Zemun	13,901	9,022	98,971	2,877
Vukovar	13,441	9,785	30,796	3,424
2. Drava				
Belishche	449	14,237	3,565	65,670
Osijek (see under Danube)				
3. Sava				
Bosanski Brod	75,710	540	7,898	21,776
Bosanska Gradishka	193	2,378	7,586	45,296
Sisak	2,614	646	99,1[illegible]	14,570
Shabac	3,757	2,862	62,459	50,196
4. King Peter Canal				
Novi Vrbas	6,021	5,243	62,164	12,955
5. Bega Canal				
Petrovgrad (Veliki Bechkerek)	15,157	26,104	64,227	13,928
6. Tisza				
Senta	3,815	16,609	19,917	11,910
Other ports	115,287	449,976	771,060	787,878

b. Ports

The bulk of Yugoslavia's water-born foreign commerce passed through foreign ports (Trieste, Fiume, Salonika) or travelled on Danubian river-craft. Triest and Fiume are the natural ports for the northern and Salonika for the southern part of the country. The Yugoslav ports on the Adriatic handled a small fraction of the overseas trade. Only three of them, Susak, Split and Kotor, have port facilities of importance.

A detailed description of Yugoslav sea ports including data on port capacities and facilities (wharfs, cranes, tugs and lighters, storage, etc.) is given in the Appendix.

37. Commercial aviation

Yugoslav aviation had made considerable progress by 1941. Practically all important cities had air transport connections with Belgrade. There were many official and private aviation and glider clubs. On January 1, 1938, there were 56 registered civil aircraft in the country, including 10 owned by the sole Yugoslav enterprise which operated regularly scheduled air services--the Yugoslav Air Navigation Company (Aeroput). 309/ Founded in 1927, this company operated the following regular air services in August, 1939:

Belgrade-Borovo-Zagreb (daily in each direction)

Zagreb-Ljubljana (daily in each direction)

Belgrade-Nish-Skoplje (daily in each direction)

Zagreb-Split-Dubrovnik (daily in each direction)

Belgrade-Sarajevo-Dubrovnik (daily in each direction)

Sarajevo-Zagreb-Vienna (daily in each direction)

Belgrade-Sofia (3 trips a week)
Belgrade-Podgorica (3 trips a week)
Skoplje-Salonika (weekly).

In 1940 the services to Vienna and Salonika were discontinued, service on the Split-Dubrovnik run suspended, and the Podgorica line was extended to Bar. Most of the services were operated only during the summer. In cooperation with Italian Avio Linee Italiane and Rumanian L.A.R.E.S., Aeroput participated in the operation of a daily service Turin-Milan-Venice-Zagreb-Belgrade-Bucharest. 310/

Mail was also carried by Aeroput to Tirana, Albania.311/

The company also does air taxi work.

In 1937, the aircraft owned by Aeroput included 2 Caudron "448", 2 Spartan Cruisers, 2 Lockheed "Electra 10A", and one each of D.H. 60, D.H. 83, D.H. 89 and M.M.S. "3". 312/

The traffic of Aeroput in 1938 and 1940 was as follows: 313/

	1938	1940
Miles flown	330,932	450,660
Passengers carried	9,448	21,013
Baggage carried, pounds	223,864	457,542
Goods and papers carried, pounds	356,979	175,715
Mail carried, pounds	18,582	39,339

The following foreign enterprises operated lines to Yugoslavia in August, 1939:

Lufthansa (Germany) operated a daily and Sunday service Berlin-Vienna-Budapest-Belgrade-Sofia-Saloniku-Athens.

Ala Littoria (Italy) flew 3 trips a week on the line Rome-Belgrade-Bucharest-Constanza.

Malert (Hungary) maintained a daily service between Budapest and Belgrade. 314/

The principal civil aerodromes are located at Belgrade, (Zemun), Borovo-Vukovar, Dubrovnik (Gruda), Maribor, Nish-Medoshevac, Osijek, Petrovgrad, Podgorica, Sarajevo, Skoplje, Sushak, Vrshac, and Zagreb. For details see/Table 4, Appendix A.

In addition to the above, there are civil landing fields at Banja Luka, Bitolj, Djakovo, Krushevac, Kragujevac, Nova Gradishka, Ruma, Sinj, Smederevo, Smederevska Palanka, and Valjevo.

In 1936 there were military airfields at Mostar, Bela Crkva, Kraljevo and Novi Sad.

Seaplane stations are at Belgrade, Divulje, Dubrovnik, Kumbor/Kotor, Split, Sushak and Vodica. 315/

38. Commerce

Yugoslavia's exports are predominantly agricultural, while her imports consist essentially of manufactured articles.

From 1932 to 1941 there was a general increase in the value of trade with a continuously favorable trade balance. The following table shows the increase: 316/

Value of Foreign Trade (in thousands of dollars)

	Exports	Imports	Balance of Trade
1932	53,809	50,359	3,450
1937	187,045	156,071	30,972
1938	150,514	148,366	2,150
1939	164,642	141,865	22,777
1940 (9 months)	156,288	131,022	25,266

Government control of foreign trade. In 1939, 66.8 per cent of the total exports, and 76.2 per cent of the imports were handled under clearing agreements. In general, exports to countries having free exchange were not controlled as to quantity or price. A few commodities, notably copper, had to be paid for in free exchange, even by "clearing" countries. Most of the other exports were controlled through two government institutions: Prizad, which controlled mainly wheat and plums, and the Institute for Promoting Foreign Trade, which controlled other agricultural products. The Shipad firm was the chief exporter of timber. The main purpose of this control was to secure the most favorable prices possible through full exploitation of the concessions--import quotas, quotas at reduced tariffs, monetary exchange, and the like--granted by other countries. 317/

A committee of the National Bank exercised control over a number of commodities--fifty-six in December 1938--which could not be imported without special permission. Most of these were imported from free-exchange countries.

Exports. Food stuffs and raw materials accounted for about 90 per cent of the total exports of Yugoslavia and consisted chiefly of wood and wood products, cereals, fruits, meats and livestock, vegetables and minerals. The greatest single item of export was timber. Wheat and corn were very important items in her export trade. There was an extensive trade in fruits, vegetables, and meats. 318/

The following table gives the composition of exports in 1939: 319/

320

Principal Exports, 1939

	Volume (in tons)	Value (in thous. dollars)	Per Cent (by vol.)
Building wood	1,118,187	25,440	29.28
Live pigs	36,186	14,438	1.27
Copper	30,147	13,163	0.79
Wheat	236,711	11,186	6.20
Fresh meat	22,101	8,425	0.58
Hemp	24,676	6,938	0.65
Fresh fruit	74,697	5,218	1.96
Eggs	17,044	4,781	0.45
Pork fat	9,104	4,179	0.24
Prunes	41,671	3,724	1.09
Hops	3,461	3,275	0.09
Live cattle	13,601	3,210	0.35
Maize	102,349	2,955	2.68
Tobacco leaves	3,462	2,788	0.09
Feathers	1,284	1,929	0.03
All others	2,083,833	52,994	54.25

Imports. About 75 per cent of the total imports consisted of manufactured products: textiles and yarns, machinery and tools, motor vehicles, leather and rubber goods, and munitions. Although the textile industry had developed greatly during recent years, large amounts of textiles and yarns, as well as raw cotton and wool, were imported. Cotton and cotton goods led the list of imports, while wool and woolen goods were third. Iron and iron goods held second place in the list of imports. The following table gives the leading articles imported in 1939.

Principal Imports, 1939 320/

	Volume (in tons)	Value (in thous. dollars)	Per cent of total volume
Cotton & cotton goods	37,095	20,598	2.99
Iron & iron goods	134,388	17,190	10.82
Wool and woolen goods	7,696	12,380	0.62
Machines, instruments, etc.	24,021	11,579	1.93
Transport equipment	11,249	7,800	0.90
Food articles	119,622	6,383	9.63
Electrical machines and articles	6,289	5,255	0.51
Petroleum, oil, gasoline	166,605	4,568	13.42
Coal	436,060	4,206	35.12
Silk and silk articles	3,957	4,095	0.32
Yarns, textiles (excluding woolen) and articles made therefrom	9,301	3,158	0.75

1320

Artificial organic colors	1,318	2,141	0.11
Medicinal goods	171	1,666	0.01
Unfinished skins, leather, shoes, shoe leather, saddlery and other needs	1,838	1,458	0.15
Printing paper	23,180	1,418	1.87
Other	258,833	37,970	20.85

The effect of the outbreak of war in September, 1939, on Yugoslavia's foreign trade is shown by a comparison of trade in the first nine months of 1940 as compared with the same period in 1939. There was a great increase in the exports of fruits and medicinal plants, but the quantity of cereals exported was only about a third as large, 78,418 tons, compared to 228,235 tons in the first nine months of 1939. 321/ Exports of live animals (including chickens) fell slightly in quantity to 38,857 tons, but the quantity of dressed and prepared meats rose from 10,132 tons valued at $4,273,000 to 27,334 tons with a value of $12,680,000. The exports of lard almost doubled from 4,704 tons to 8,093 tons. 322/ Exports of timber to Italy and Germany doubled, while Hungary took three times as much as in the first nine months of 1939. The closing of the Mediterranean made shipping to other countries difficult. 323/ Total exports of wood increased from 909,190 tons valued at $19,810,000 to 1,178,016 tons valued at $31,612,000. 324/ Imports of textiles fell from 46,560 tons in the first nine months of 1939 to 36,930 tons in 1940. Imports of cotton, woolen, and linen materials decreased, as did hemp and jute, but imports of silk and artificial fibers increased. 325/ Exports of metals increased, especially the output of lead, iron and aluminum. Imports of the same metals dropped in quantity from 32,289 tons to 19,667 tons, although the value increased from $2,869,000 to $3,207,000. 326/

Leading markets. Since 1934, when she superseded Italy, Germany has been Yugoslavia's leading market. The absorption of Austria and Czechoslovakia further increased Germany's

share of the trade of Yugoslavia.

The following table gives the position of the leading states which traded with Yugoslavia. 327/

(Thousands of dollars and per cent of total)

EXPORTS:	1937		1938		1939	
	Value	%	Value	%	Value	%
Germany	40,594	21.7	54,089	35.9	82,543	31.9
Italy	17,506	9.4	9,671	6.4	17,400	10.6
Austria	25,289	13.5	9,116	6.1		
Czecho-slovakia	14,702	7.9	11,879	7.9	*22,938	13.9
England	13,855	7.4	14,467	9.8	10,935	6.6
United States	8,675	4.6	6,735	5.1	8,372	5.1
Hungary	6,648	3.6	6,423	4.3	8,625	5.2
IMPORTS:						
Germany	50,529	32.3	48,251	32.5	67,643	47.7
Italy	12,818	8.2	13,261	8.9	16,608	11.7
Austria	16,056	10.3	10,209	6.9		
Czecho-slovakia	17,302	11.1	15,806	10.7	2,212	3.5
England	12,201	7.8	12,862	8.7	7,216	5.1
United States	8,929	6.0	9,311	6.0	7,396	5.2
Hungary	4,200	2.7	189,425	3.8	5,080	3.6

* Protectorate of Bohemia and Moravia

In the first nine months of 1940, the last available statistics show an increase in trade with Germany, Austria, Czechoslovakia, and Switzerland, and the Balkan countries, in contrast to a sharp drop in trade with France, England, Belgium, and Holland. The greater Balkan trade was due to increases in sales to countries friendly to the Axis, who probably resold part of the commodities to Germany. The following table gives the per cent of value and volume of trade in the third quarter of 1939 and 1940: 328/

Destination of Exports in the First Nine Months of 1939 and 1940, in Percentages

	By Value		By Volume	
	1939	1940	1939	1940
Central Europe	53.30	62.12	43.03	48.46
Western Europe	18.08	1.64	10.91	0.18
Mediterranean States	13.29	15.97	22.96	26.84
Balkans	4.24	3.00	7.20	8.61
Eastern Europe	4.86	8.66	9.87	14.93
Scandinavian and Baltic States	0.74	3.28	0.94	0.71
Other Countries	5.49	0.33	5.09	0.27

1320

Origin of Imports in the First Nine Months of 1939 and 1940, in Percentages

	By Value		By Volume	
	1939	1940	1939	1940
Central Europe	56.49	70.95	49.83	50.80
Western Europe	10.56	0.69	10.49	1.12
Mediterranean States	12.44	7.86	9.00	4.96
Balkans	3.58	9.97	17.54	36.13
Eastern Europe	4.63	5.54	8.02	5.51
Scandinavian and Baltic States	0.72	0.40	0.15	0.07
Other Countries	11.58	4.54	4.97	1.41

(The 1940 percentages of exports by value, as given in the source, total 101.00 per cent.)

After the conquest of Yugoslavia in April, 1941, Germany, Italy, Hungary, Rumania and Bulgaria annexed certain sections outright. Statistics on the foreign commerce of these annexed areas will probably be included in those of the annexing states. Three nominally independent states remain--Croatia, Serbia and Montenegro. The latter two are under military occupation, and no data have been received as to their foreign commerce. The following information relates to the foreign trade of Croatia since April, 1941: In July, 1941, 46 per cent of Croatia's exports went to Germany, 36 per cent to Italy, and 18 per cent to other countries. Lumber and crude oil were the leading commodities exported, with foodstuffs forming less than 6 per cent of the total exports. 329/ The latter figure is probably too low.

The reference to exports of crude oil is significant. It presumably refers to re-exports, since the trade agreement made with Rumania during the summer of 1941 provided that Rumania would supply 60,000 tons of oil products in return for iron ore, chemicals, and railroad ties to the value of $491,803. 330/

An agreement with Hungary on June 14th, provided for the export of 66,000 tons of Croatian iron ore, 27,500 tons of firewood, and 3,860 tons of lumber in return for 5,000 pigs and unspecified quantities of seed, millet, livestock, iron products,

agricultural machinery and fertilizer. 331/

An agreement with Italy provided for Croatian port rights in Fiume, for an interchange of Croatian bauxite for aluminum, and for cooperation in the production of cigarette papers and matches. 332/

The Swiss agreed to send textiles, metalware, machinery and chemicals to the value of $819,672 in return for an equal value of timber, coal, poultry, eggs, fruit, wine and chemicals. 333/

No information has been received concerning a trade agreement between Germany and Croatia. As, however, Germany has been acquiring bank stock giving control of the chief industries of Croatia, Germany's interest in the exports of Croatia is probably dominant. 334/

It seems likely that Germany, and to a lesser extent Italy, have made strenuous efforts to expand the production and the exportation of Yugoslav commodities needed by them. They have probably sent men and machinery to aid in developing the resources of the country. On the other hand, the unsettled economic conditions, and sabotage and destruction by the civilian population and by the Chetniks, have probably interfered with production to some extent.

39. Communications

Telephone. Until 1941 Yugoslavia was divided into eight postal, telegraph and telephone districts, which coincided with the nine banovinas, except that the district of the Prefecture of Belgrade included a portion of the Dunavska Banovina and the Vardarska and Moravska Banovinas formed one district. The greatest amount of telephone equipment was in the Belgrade and Zagreb districts. The most poorly equipped was the Cetinje district, corresponding to the Zetska Banovina. 335/

The following telephone equipment was in use in 1938: 336/

Telephone Exchanges

Manual, with local battery	1,402
Manual, with central battery	16
Automatic, principal	12
Automatic, auxiliary	21
Total	1,451

Pay Stations

Manual	1,465
Automatic	206
Total	1,671

Private Telephones

Manual	20,732
Automatic	39,258
Total	59,990

Almost all of the telephone equipment was of German manufacture (Siemens-Halske). 337/

The length of the telephone lines, as of 1938, was: 338/

Urban systems	3,619 miles
Interurban systems	6,893 "
Total	10,512 "

Most of the telephone wire is copper—128,756 miles; 19,935 mileswere iron and 217 of alloy. Only 396 out of 288,328 telephone poles were of iron. 339/

The following number of calls were handled in 1938: 340/

Urban calls	272,573,090
Interurban calls	4,152,103
International calls (outgoing)	182,320
International calls (incoming)	175,772
Transit messages	49,971
Total	277,131,256

Late in 1938 new telephone lines were opened between Belgrade and Athens through Skoplje, Djevdjelija, and Salonika, and from Belgrade to the new German frontier via Zagreb. Three new lines between Belgrade and Bucharest,

YUGOSLAVIA
TELEPHONE SYSTEMS AND RADIO BROADCASTING STATIONS

0 25 50 75
Miles

AUSTRIA
HUNGARY
ITALY
RUMANIA
BULGARIA
ALBANIA
GREECE
ADRIATIC SEA
ITALY

To Klagenfurt
To Graz
Radkersburg
G. Radgona
Maribor
To Szombathely
To Budapest
To Budapest
Bled
Varazhdin
Gyékényes
Koprivnica
Kaposvar
Pécs
Baja
Szeged
Subotica
Ljubljana
Sevnica
Zagreb
Barcs
Virovitica
Dugoselo
Voloder
Sombor
Velika Kikinda
Mali Idjosh
Novi Vrbas
Timisoara
Trieste
Karlovac
Osijek
Fiume
Sushak
Ogulin
Nova Gradishka
Vinkovci
Petrovgrad
Omisalj
Rabaz
Novi
Krk
Senj
Baska
Brod
Andrijevci
Tovarnik
Novi Sad
Vrshac
Ruma
Rab
Tablanac
Banjaluka
Brchko
BELGRADE
Ossero
Novalja
Karlobag
Pag
Gospich
Lussil piccol
Shabac
Pozharevac
Palanka
Craiova
Valjevo
Negotin
Gruia
Lapovo
Zara
Zemunik
Jagodina
Sarajevo
Uzhice
Chachak
Parachin
Zajechar
Shibenik
Kraljevo
Pojate
Split
Prijepolje
Nish
Superiar
Bol
Mostar
Rashka
Pirot
Makarska
Hoar
Novi Pazar
Metkovich
Trpanj
Kosovska Mitrovica
Korchula
Blato
M. Ston
SOFIA
Trebinje
Pech
Dubrovnik
Hercegnovi
Kotor
Cetinje
Podgorica
Budva
Prizren
Kumanovo
Bar
Skadar
Skoplje
Veles
Shtip
Debar
Strumica
Doiran
Okhrid
Djevdjelija
Kilkis
Bitolj
Florina
Salonika

LEGEND

TELEPHONE SYSTEMS

- Existing overhead line
- Planned long distance cable
- Principal exchange
- Existing amplifying station
- Amplifying station under construction or planned

RADIO BROADCASTING STATIONS

- Standard wave transmitter
- Short wave transmitter
- Station under construction 1940
- [R] Reported small local station

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and 3 lines between Belgrade and Szegedin (Hungary), providing direct connection with Budapest, Prague and Berlin, were opened in 1939. New equipment was also purchased for the construction of 3 new lines between Zagreb and Trieste. All of these lines were equipped with high-frequency installations.

Reliable and rapid communications with all parts of the Kingdom, however, did not exist. 341/

Telegraph. In 1938 Yugoslavia had 10,704 miles of telegraph lines under the Postal Administration, and 1,143 miles under the Railway Administration, or a total of 11,847 miles. These lines required 57,209 miles of wire.342/ This total apparently included the following new lines completed during 1938: Velikevci-Krstina-Shupnjak, Krapina-Shupnjak, Virovitica-Zrinj, and Josip Dom-Rudopolje. 343/ The length of the lines in August 1939 was reported to be 11,710 miles, with 57,912 miles of wire. Belgrade and Zagreb were connected with all neighboring capitals.344/ During 1938, 3,573,789 messages were transmitted, of which 3,067,861 were within the country, while 505,928 were to or from foreign countries. 345/ In that year 2,156 telegraph offices were in operation, an increase of 83 over the preceding year. 519 of these offices were under the Railway Administration. 346/ The apparatus in use consisted of 1,743 Morse sets, 309 Morse-Clopfer, 116 Hughes sets (5 of them double), 5 Baudot quadruple sets, 6 Siemens teletype, and 12 Creed teletype sets. 347/

Cable. A cable from Igalo (not far from Cetinje) to Nabel, Tunis, was opened on February 28, 1937. 348/

Wireless telegraph. In 1941 the following transmitters were listed: 349/

Belgrade:

Call Letters	Coordinates	Kc.	m.	Power, in 1,000 kw.
YUA	20°28'21"E. 44°48'46"N.	6,100	49.18	1
YUB	20°20'57"E. 44°52'28"N.	6,100	49.18	10
YUC) YUD)		9,505	31.56	10
YUE		11,735	25.56	10
YUF) YUG)		15,240	19.69	10
Ljubljana: a/	14°35'00" E. 46°07'30" N.	527	569	5.25
Zagreb:	15°59'25" E. 45°49'02" N.	1,086	276.2	-

a/ The Ljubljana station was also equipped with a wireless telephone operating on the same frequency.

In addition there were two coastal stations listed as operating in 1941: 350/

	Call Letters	Coordinates	Kc.	m.	Power in 1,000 kw.
Klinci Radio	YTK	18°33'58" E. 42°24'51" N.	438 500	685 600	3
Shibenik Radio	YTS	15°54'12" E.	470 500	638 600	3

Both transmitted a continuous signal and used frequency modulation equipment.

Radio. In 1940 Yugoslavia had the following broadcasting stations: 351/

	Frequency (kilocycles)	Wave length (meters)	Power (watts)	Height of Antenna (ft.)
Belgrade	686	437	20,000	328
Belgrade, short wave	6,100	49.2	1,000	
Zagreb	1,086	276	300	161
Ljubljana	527	569	5,000	328

A short wave station at Zemun (near Belgrade), with a 10,000-watt transmitter, was to be completed in 1940, and the radio telegraph station at Skoplje was to be transformed into a 20,000-watt broadcasting station. 352/ The Germans were reported preparing to set up powerful broadcasting stations near Belgrade and Zagreb for propaganda purposes in 1941. 353/

The number of registered receiving sets on April 30, 1940, was 168,730, about 70 per cent of which were 3 or 4-tube sets. There also were some 2-tube and crystal sets, as well as more powerful ones. 354/

Amateur radio broadcasting was prohibited.

Transmission of facsimiles. There were no radio facilities for this purpose in 1940, but a wired Belinograph system connected Belgrade, Zagreb and Ljubljana with Paris. 355/

Postal services. In 1938 Yugoslavia had 3,982 post offices. The total length of the mail routes was 37,309 miles, including 2,432 by wagon, 654 by horseback, and 2,357 on foot. A Yugoslav company, "Aeroput", maintained summer airmail service from Belgrade to Zagreb, Sarajevo, and Skoplje, and on the Sarajevo-Dubrovnik and the Ljubljana-Sushak-Zagreb lines. Yugoslavia was also connected with most capitals of Europe by foreign airlines. 356/

In 1938 the Postal Administration handled 594,243,634 items. 357/

40. Finance

The monetary unit of Yugoslavia was the dinar, divided into 100 paras. Coins were the 25 and 50 para pieces and the 1, 2, 10, 20, and 50 dinar coins (the last three silver). Paper currency consisted of 5, 10, 100, 500, and 1,000 dinar notes.

The value of the gold dinar (not in circulation) was .0265 grams of fine gold, or 19.3 cents in U.S. currency. The official rate for the U.S. dollar was 44.25 dinars, but this was not used in practice. For earnings on U.S. capital investments in Yugoslavia the rate was as high as 105 dinars to the dollar. During 1940 the average rate for the dollar was 54.75 dinars ($0.018 per dinar). 358/ Until

1939 the dinar was linked to sterling. In 1940 the rate was 217 dinars to the pound. 359/

Before the attack on Yugoslavia, German interests were getting control of commercial banking in Zagreb and Belgrade. After the occupation the National Bank of Yugoslavia was liquidated. 360/ It was replaced by the Serbian National Bank, similar to the Bank of Issue of Poland, and supervised by a German director. It was capitalized at 100 million dinars. 361/ For a while all bank withdrawals were blocked. Acceptance of Reichskreditenkassenscheine (occupation marks) were made compulsory at the rate of one mark to 20 dinars. The Serbian National Bank issued Serbian dinars in the same denominations as the old dinar. These became the only legal currency, but the occupation marks continued to be exchangeable at the rate of one mark for 20 dinars. 362/

In October, 1941, the gold dinar was revalued at .0179 grams fine gold and the rate of the dollar reduced to 50 dinars. 363/

In independent Croatia a new National Bank of Croatia was set up on the pattern of the National Bank of Slovakia. While the Germans thus made a pretense of recognizing the national sovereignty, a German adviser was attached to the bank. 364/

A new currency was introduced—the kuna—consisting of 100 banica, and issued in units of 50, 100, 500, and 1,000 paper banknotes. One kuna was made equal to one dinar, exchangeable at the Croatian National Bank. 365/ In a trade agreement with Vichy France, concluded in April, 1942 the kuna was placed on a par with the franc. 366/

In southern Macedonia, occupied by Bulgaria, the Bulgarian lev is the legal currency (100 dinars equals 192 leva). 367/ In the areas annexed by Hungary, Italy, and Germany, the currencies of these countries are in use.

Banknote circulation in Yugoslavia had risen from 5 billion dinars in 1936 to a reported 17 billion just before the invasion. 368/

Croatia assumed 42 per cent of the Yugoslav paper money (6,413 million dinars). By the end of 1941 the Croatian banknote circulation was 8,352 million kuna. 369/

Table 1.

LOCATION OF MINES AND SMELTERS, 1932 370/

a) РУДАРСТВО И ТОПИОНИШТВО —
I Списак активних рударских и топиоиичких предузећа —

a) MINES ET FONDERIES
I Liste des entreprises minières et des fonderies en activité

Врста производа / Espèce du produit	Бановине — Banovine — Dravska	Drinska	Dunavska	Moravska	Primorska	Savska	Vardarska	Vrbaska	Zetska	Број предузећа / Numéro d'entreprises
	Назив предузећа — Nom de l'entreprise									
Каменн угаљ Houille	—	Majevica	—	Blagovesti Dobra sreća Jerma A. D. Podvis Rtanj Srp. Balkan Tresibaba Vrška Čuka	—	—	—	—	Iber Lastva D. D.	11
Мрки угаљ — Houille brune — Лигнит — Lignite	Brezno-Huda Jama Brezovica Donjice Loka Hrastnik Kočevje Libeje Leše Pečovnik Podgorci Rajhenburg Stanovsko Strmica Sv. Križ pri Kostanjevici Šemnik Št. Janž Trbovlje Trobni dol Zabukovca Zagorje	Breza Kakanj Kukavica Zenica	Mionica Orašac Vrdnik	Aleksinac Bogovina Hajduk Veljko Jelašnica Nova Studica Resava Senjski Slavuc-Vrčić Soko Stubica	Duvno Mostar Siverić Skradin Veljušić	Beletinec Bela Kadovan Hudinečina Golubovec Ivanopolje „Jelena"-Golubovec Krapina „Marija"-Zavrsje Mirna Kadoboj Jurograd		Banja Luka Dobrljin Drvar Maslovare Suhača Teslić		57
	Globoko Velenje	Bresnica Bukinje Kreka Prkosava-Rudovac Ugljevik	Barošević Klenovnik Kostolac Sasa Sv. Petar Veliki Crljeni	Despotovac Dubrava Ivanovo Jeklov Milive-Plažane Zaječar Zvezdan	Radusa	Bregi Carevdar Crnkovic-Subotica Diaka Sabolović-Subotica Donjara Glogovac Gojla i Paklenica Ivanec Konjscina Ladanje-Donje Lepavina Lovca-Donja Maretički Petkovački Pe-ceno Pitomacko-Česmjevački Popovaca Poznanovec Slavonsko rud. udruženje Topusko Vinko Sumecki	Kosovo Skopije Nerezi		Plevlje	45
Пирит Pyrite				Majdan Pek Trepca	—					2
Бакарна руда Minerai de cuivre				Sv. Djorde-Rus	Mrsi					2
Железна руда Minerai de fer		Vareš				Topusko		Ljubija		3
Оловно-цинкана руда Minerai de plomb et de zinc	Litija Mežica			Trepca						1

(Наставак)

Врста производа Espèce du produit	Бановина — Banovine Назив предузећа — Nom de l'entreprise					Број предузећа Nombre d'entreprises
	Dravska	Drinska	Dunavska	Moravska		
Антимонова руда-Minerai d'antimoine	–	–	–	Lisanski		1
Хромна руда Minerai de chrome	–	Dubočica		–		1
					Skopska Crna Gora	–
					Arnička Deva Jezerina Hromovik Lokaje Lozhoten Orsoje, Kaduša i Gjorance Suljvari Trnovo	10
Манганска руда-Minerai de manganèse		Čevljanovici Semizovac				2
Боксит-Bauxite	–	–	–		–	1
					Drnis Kalun Visoko	3
Мермер Marbre	–	Podrinski	Venac			2
Водонично камење Meulières	–	–	–		–	1
					Jelašnica	–
Магнезит Magnésite	–	Pavlika Ivan Kozjak				3
Гипс-Gypse	–	–	–		–	1
Асфалтни камен-Asphalte	–	–	–		–	1
Слана вода Eau salée	–	Kreka				1
					Paklina	1
Земни плин Gaz naturel	–	–	–		–	1
					Teslić Ulanik (Ulog) Bojavica	–
Азботоносна земља-Quartz aurifère	–	–	–		–	2
					Senica	–
Сирови хас Sable	–	–	–		–	1
					Укупно — Total	151

(Suite)

Nombre d'entreprises	Banovine Nom de l'entreprise					
	Primorska	Savska	Vardarska	Vrbaska	Zetska	
2			Skopska Crna Gora	–	–	
10			Arnička Deva Jezerina Hromovik Lokaje Lozhoten Orsoje, Kaduša i Gjorance Suljvari Trnovo			
2		–	–		–	
3	Drnis Kalun Visoko		–	–	–	
2					Kacic-Buljetinac	
1		–	–	–	–	
3			Jelašnica Pčinja			
1	Paklina	–	–	–	–	
1						
2	Teslić Ulanik (Ulog) Bojavica	–	–	–	–	
1	Senica	–	–	–	–	
151			Укупно — Total			

Ia Топионице —

Врста производа Espèce du produit	Бановине Banovine Назив предузећа — Nom de l'entreprise				
	Dravska	Drinska	Dunavska	Moravska	
					Sv. Đorđe Bor
		Aus			
	Zajas				
	Spodnja Hudinja vas				
		Kreka			
			Kosjerić		Sv. Đorđe Bor

Ia Fonderies

Nombre d'entreprises	Banovine Nom de l'entreprise					
	Primorska	Savska	Vardarska	Vrbaska	Zetska	
1						
2		Tupurau				
1						
1			–			
1			–			
2						
8					Ukupno — Total	

Table 2
Principal Urban Power Resources, 1929-38 371/

	Location	Power in kw.	Power Source	Current and Phases	Consumer Voltage	Fuel
Dravska Banovina	Bohinjska Bistrica	140	Water turbine 350 h.p.	3-ph.a.c.	380 & 220	
"	Celje	200	1 steam eng. of 30 h.p. 1 steam turbine	3-ph.a.c.	110 & 190	
"	Fala	25,000	6 Francis turbines of 40,000 h.p. in all. *	3-ph.a.c.	380,220 & 500	
"	Kamnik	250 (supplied 5,000 lights)	2 water turbines 250 h.p. 1 diesel eng. 276 h.p.	3-ph.a.c.	Not known	
"	Ljubljara	1,400	Steam eng. of 1,600 h.p. Diesel eng. of 2x450 h.p.	d.c. 3-wire	2x150 & 380x220	
"	Novo Mesto	50	Water turbines of 120x50 h.p.	3-ph.a.c.	220	
"	Skofja Loka	110	1 turbine of 230 h.p. and 1 Diesel eng. of 220 h.p.	3-ph.a.c. 5,000/380/220	380 & 220 (50 periods)	

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Table 2 -- cont'd

	Location	Power in kw.	Power Source	Current and Phases	Consumer Voltage	Fuel
Dravska Banovina	Trzhich	260k. VA.	2 A.E.G. Union water turbines	3-ph.a.c.	--	
"	Trzhich	4,060	6 Francis spiral turbines and 6 A.E.G. Union generating engs., the former for 4,656	3-ph.a.c.	380/220	
"	Zhirovnica	600	2 A.E.G. Union water turbines	3-ph.a.c.	380 & 220	
"	Kakanj		1 steam eng. and a.c. 2 steam turbines (50 periods) coupled to 3 gens: 900 kw., 1,222.8 h.p.,750 KW., 1,019h.p.,250h.p.			Czecho-Slovak coal of 4,200 calories
"	Kreka		2 steam engs. of 500 h.p. coupled to 2 gens. of 350 KW. each, and 1 steam turbine coupled to a gen. of 1,650 KW.			Lignite
"	Shabac			3-ph.		wood
Dunavska Banovina	Novi Sad	5,000	Steam generator plant 37 1b/			

Table 2 -- cont'd

	Location	Power in kw.	Power Source	Current and Phases	Consumer Voltage	Fuel
Savska Banovina	Pozhega	250	1 Andritz water turbine 300 h.p., 1 Leobersdorf Diesel engine 200 h.p.	3-ph.a.c.	190 & 110	
"	Skrad	90	1 water turbine	3-ph.a.c.	380 & 220	
"	Varazhdin	190	3 Diesel engines of 725 h.p.	S.-ph.a.c.	110	
"	Zagreb	4,400	1 Prag Tandem 400 kw. engine, 1 A.E.G. turbine 1,200 kw., 1 A.E.G. turbine 2,400 kw., 1 Skoda turbine, 5,500 kw.	3-ph.a.c. with a separate d.c. supply for traction.	110 & 220 ltg., and 3x380 pr. (50 periods)	
Belgrade Prefecture	Belgrade**	10,800	3x8,000 KVA Brown-Boveri turboaltrs.	3-ph (50 periods) Frequency controlled.	206 & 120 ltg. & 380 & 220 pr.	
Zetska Banovina	Dubrovnik	450	1x180 KVA, 1x380 KVA, 1x780 KVA Ceskо-Moravska-Kolben-Donek-Prahe, 1x180 KVA Siemens-Schuckert, Berlin.	3 ph.a.c. (50 periods)	125 ltg., 220 pr.	Naphtha, Diesel motors

Table 2 -- Cont'd

	Location	Power in kw.	Power Source	Current and Phases	Consumer Voltage	Fuel
Primorska Banovina	Split 371d/	4,000	2 transformers distribute power from Gubavica hydro-electric station. ***	50 periods	380/220	Water power
Vardarska Banovina	Skoplje (3 mi. WSW of the city).		Three 1,500 h.p. turbines; 27 million kw.h. per year. 371e/			

* In 1938 (?) Fala was reported to have 5 turbines generating 6,000 h.p. each, and 2 generating 10,000 h.p. each, giving a total of 50,000.

** In 1931, a new electric power plant was reported, with a capacity of 24,000 kw. and a production of 18,000 kw.

*** This largest electric power plant in former Yugoslavia has been recently reported dynamited by the guerrillas.

Table 3.

Tablica III/1-d

RAILWAY TRAFFIC ACCORDING TO LINES AND RAILWAY ADMINISTRATIONS, 1938 372/

Tableau III/1-d

Rad vozova i kola na pojedinim prugama Parcours des trains et véhicules par lignes

Redni broj	329 Oznaka pruge normalnog koloseka[1] Designation des lignes de la voie normale[1]	330 Prosečna eksploatac. dužina u km Longueur exploitée moyenne en km	331 Na 1 km eksploatacione dužine — Par km exploité il revient: voznih km — de trains-km: putničkih vozova de trains de voyageurs	332 mešovitih vozova de trains mixtes	333 teretnih vozova de trains de marchandises	334 radnih vozova de trains de service	335 Svega Total	336 kolsko-osovinskih km — d'essieux-km: putničkih kola de voitures	337 teretnih kola — de wagons à marchandises: natovarenih chargés	338 praznih vides	339 Svega Total	340 Svega Total	341 bruto-tonskih km de tonnes-km brutes	Redni broj
	DIREKCIJA BEOGRAD — DIRECTION BEOGRAD													
1	Beograd—Niš	248·5	6.699	—	6.058	140	12.922	195.176	240.958	180.487	871.140	566.616	4,428.959	1
2	Niš—Skoplje	207·8	3.685	63	1.838	275	5.861	87.154	60.899	80.790	91.689	178.848	1,518.500	2
3	Skoplje—Devdelija (165·8) sa prugom Vojvoda Putnik tov.—Rasputnica (Dračevo) (0·5)	166·3	1.679	933	1.160	85	3.857	52.688	59.769	43.050	102.819	155.457	1,262.127	3
4	Niš—Caribrod	108·9	2.090	1.368	1.079	96	4.688	72.781	56.896	46.056	102.952	175.683	1,485.180	4
5	Beograd—km 10·6 (u pravcu Pančevo Predgrađe—Vršac)	10·6[2]	6	—	1.708	3	1.717	268	102.567	39.282	141.849	142.117	1,229.084	5
6	Beograd—Beograd fabrika šećera	8·4	—	—	521	—	521	—	18.560	4.057	18.217	18.217	171.031	6
7	Topčider—Savski Most	8·6	160	—	6.878	40	7.078	20.914	850.602	160.599	511.201	682.115	4,868.880	7
8	Topčider—Mala Krsna	65·5	4.695	—	2.518	47	7.060	62.349	85.126	64.051	149.177	211.526	1,666.989	8
9	Mala Krsna—Velika Plana	88·0	2.184	726	2.584	212	5.706	44.269	201.194	78.605	174.799	219.068	1,785.208	9
10	Mala Krsna—Smederevo	113	2.921	8.651	598	200	7.165	68.566	82.865	88.620	70.985	134.551	1,040.429	10
11	Mala Krsna—Požarevac B. Ž.	15·9	6.891	2.780	11	248	8.930	89.468	25.425	14.286	89.711	129.174	1,150.280	11
12	Lapovo—Kraljevo	85·3	2.410	—	2.687	46	5.143	52.429	117.860	57.688	175.048	227.477	1,475.070	12
13	Kraljevo—Skoplje	250·7	2.815	—	2.435	98	1.878	47.367	107.825	58.762	161.590	208.957	1,668.290	13
14	Priština—Kosovo Polje (7·8) sa prugom Kosovo Polje—Peć (91·1)	98·1	550	1.825	—	24	2.399	23.426	8.048	4.263	12.811	85.657	278.389	14
15	Stalać—Kruševac (14·6) sa prugom Dedina—Obilićevo (2·5)	17·1	15	1.176	741	—	2.232	11.389	11.728	18.358	55.081	66.420	555.976	15
16	Pralkovo Pristanište—Crveni Krst (1·2·1) sa prugom Prahovo Selo—Kusjak (3·7)	1·5·8	1.434	287	547	82	2.350	23.908	24.891	11.548	36.439	60.347	516.122	16
17	Doljevac—Kurtamajs	5·5·9	731	789	730	76	2.267	24.472	16.141	7.855	23.496	47.968	388.857	17
18	Veles—Kočane	45·5	370	1.557	—	121	2.048	20.516	9.521	6.481	15.952	80.468	287.063	18
19	Veles—Prilep	85·1	1.196	798	500	98	2.792	27.006	14.580	7.498	22.328	49.329	395.045	19
20	Prilep—Bitolj Kremenica	61·0	1.120	1.047	335	15	2.517	22.981	7.938	8.656	11.654	36.275	278.908	20

[1]) U zagradama označena je dužina pojedinih pruga u kilometrima

[2]) Pri delenju uzeto je u obzir otstojanje Beograd Beograd Dunav 7·9 *km*

[1]) Entre parentheses est indiquée la longueur de différentes lignes en kilomètres

[2]) Lors de la division la distance Beograd Beograd Dunav est prise pour 7·9 *km*

Redni broj	329 Oznaka pruge normalnog koloseka Désignation des lignes de la voie normale	330 Prosečna eksploataciona dužina u *km* Longueur exploitée moyenne en *km*	331	332	333	334	335	336	337	338	339	340	341	№ d'ordre
		Na 1 *km* eksploatacione dužine otpada — Par *km* exploité il revient												
			voznih *km* de trains-*km*					kolsko-osovinskih *km* — d'essieux-*km*						
			putničkih vozova de trains de voyageurs	mešovitih vozova de trains mixtes	teretnih vozova de trains de marchandises	radnih vozova de trains de service	Svega Total	putničkih kola de voitures	teretnih kola — de wagons à marchandises			Svega Total	bruto-tonskih *km* de tonnes-*km* brutes	
									na ovarenih chargés	praznih vides	Svega Total			
	DIREKCIJA ZAGREB — DIRECTION ZAGREB													
21	Slavonski Brod—Novska—Sunja—Sisak (158·0) sa prugama: Jasenovac—Savska obala (1·2) i Sisak—Galdovo (2·8)	156·6	5.606	586	8.886	62	14.540	199.928	428.887	217.908	646.795	846.723	7,158.480	21
22	Sisak—Rasputnica—Zagreb gl. kol.—Zagreb Sava—Zaprešić (65·7) sa prugom Savski Most—Zagreb Sava (1·8)	67·5	6.421	806	7.612	218	15.057	222.580	878.723	168.708	547.432	770.012	6,721.096	22
23	Zagreb gl. kol.—Karlovac—Sušak (228·6) sa prugama: Sv. Klara—Hrvatski Leskovac (1·5), Ostarije—Rasputnica (Josipdol) (0·8), Škrljevo—Bakar (10·1), Škrljevo—Fiume (8·0), Sušak ogranak—Sušak (2·9)	241·9	4.889	1.012	4.094	49	9.994	188.174	197.685	81.602	279.287	417.461	3,698.871	23
24	Ogulin—Knin—Split (325·6) sa prugom Perković-Slivno—Šibenik (21·5)	347·1	3.152	1.191	2.600	87	6.980	86.412	98.424	55.075	153.499	239.911	2,006.416	24
25	Zagreb gl. kol.—državna granica kod Đekenješa (99·8) sa prugom Zagreb gl. kol.—Zagreb ranž. kol. (4·8)	104·6	4.486	769	8.484	101	9.250	122.684	175.668	87.002	262.670	385.354	3,941.896	25
26	Sunja—Dobrljin—Banja Luka (129·5) sa prugom Bosanski Novi—Bihać (66·2)	196·7	2.044	1.184	1.177	80	4.885	56.960	59.422	38.519	97.941	134.901	1,076.080	26
27	Dalj—Osijek gl. kol.	28·1	8.501	284	1.688	16	5.889	55.455	77.776	28.120	105.896	161.749	1,854.945	27
28	Capraq—Karlovac (102·2) sa prugom Karlovac—Bubnjarci (1·1)	108·8	1.810	790	614	27	8.241	81.088	15.419	10.071	25.490	56.528	488.098	28
29	Osijek gl. kol.—Beli Manastir—drž. granica	82·1	1.018	1.475	318	16	2.827	86.867	29.804	21.462	51.266	88.188	705.887	29
30	Beli Manastir—Batina Skela—Dunavska obala (27·8) sa prugom Beli Manastir—Baranjsko Petrovo selo—drž. granica (10·8)	38·1	—	1.810	—	—	1.810	19.915	2.805	1.868	4.168	24.088	204.016	30
31	Osijek gl. kol.—Strizivojna Vrpolje (47·7) sa prugom Osijek gl. kol.—Osijek Dravska obala (2·8)	50·5	156	1.499	941	32	2.627	24.804	42.110	16.184	58.244	82.548	671.628	31
32	Strizivojna Vrpolje—Šamac (19·7) sa prugom Šamac—Savska obala (1·8)	21·5	—	—	2.007	80	2.087	25.251	15.097	18.770	28.867	54.118	890.419	32
33	Osijek gl. kol.—Našice—Nova Kapela Batrina (108·1) sa prugom Pleternica—Velika (25·2)	133·3	1.184	1.862	1.595	20	4.611	56.842	59.126	28.328	87.454	124.296	986.189	33
34	Našice—Podravska Slatina—Noskovci—Dravska obala	56·6	1.664	896	2.102	—	4.662	40.087	82.474	31.810	114.284	154.321	1.265.017	34
35	Pakrac—Suhopolje—Virovitica—drž. granica kod Barča (93·6) sa prugama Bastaji—Končanica (12·6), Podravska Slatina—km 8·625 kod stanice Suhopolje (16·9)	128·1	1.087	1.286	1.058	17	3.898	27.066	37.804	17.092	54.896	81.462	657.904	35
36	Virovitica—Kloštar—Križevci (90·7) sa prugama: Bjelovar—Garešnica (54·5), Kloštar—Koprivnica—Varaždin (77·0), Pavlovac—Dražica—Grubišno Polje (14·9), Bjelovar—Bjelovar Mlin (2·2)	289·3	1.882	1.600	1.138	24	4.144	40.614	54.880	25.061	79.891	120.005	986.824	36
37	Novska—Dugo Selo (94·8) sa prugom Banova Jaruga—Pakrac (30·1)	114·4	2.989	576	2.248	22	5.830	78.188	145.019	58.960	198.979	277.117	2,438.146	37
38	Zaprešić—Zabok Krapinske Toplice—Čakovec (98·8) sa prugom Zabok Krapinske Toplice—Krapina (16·2)	115·0	3.871	503	2.595	88	6.502	65.841	37.088	20.549	57.582	122.928	1,184.873	38
39	Zabok Krapinske Toplice—Gornja Stubica	10·6	—	2.712	204	5	2.921	19.844	1.547	1.290	2.877	22.721	196.849	39
40	Varaždin—Čolubovec	33·7	—	2.229	192	49	2.470	22.940	18.568	16.800	34.868	57.108	396.557	40

Redni broj	Oznaka pruge normalnog koloseka Désignation des lignes de la voie normale	329	880	881	882	883	884	885	886	887	888	889	840	841	Nº d'ordre
			Na 1 *km* eksploata- cione dužine otpada — Par *km* exploité il revient												
			Prosečna eksploata-ciona dužina u *km* Longueur exploitée moyenne en *km*	voznih *km* de trains-*km*					kolsko-osovinskih *km* — d'essieux-*km*						
				putničkih vozova de trains de voyageurs	mešovitih vozova de trains mixtes	teretnih vozova de trains de marchandises	radnih vozova de trains de service	Svega Total	putničkih kola de voitures	teretnih kola — de wagons à marchandises			Svega Total	bruto-tonskih *km* de tonnes-*km* brutes	
										natovarenih chargés	praznih vides	Svega Total			
	DIREKCIJA LJUBLJANA — DIRECTION LJUBLJANA														
41	**Zaprešić—Zidani Most**		61·8	8.515	—	7.241	129	15.885	250.892	416.212	160.652	576.864	827.756	7,352.270	41
42	**Šent Ilj drž. gran.—Maribor gl. kol.—Zidani Most—Rakek—drž. gr. (225·8) sa spojnim kolosekom kod Zidanog Mosta (0·4)**		226·2	7.869	108	6.602	262	14.886	218.926	316.418	191.475	507.893	721.819	6,305.953	42
43	**Maribor gl. kol.—Prevalje—drž. gr. (*8·0) sa prugom Tezno—Maribor kor. kol. (0·6)**		88·6	2.874	36	894	178	3.982	44.666	34.829	17.890	52.719	97.885	799.071	43
44	**Pragersko—Kotoriba (94·0) sa spojnom prugom kod Pragerskog (0·8)**		94·8	4.667	238	2.110	99	7.109	83.894	88.358	65.024	153.382	236.776	1,984.769	44
45	**Ormož—Murska Subota—Hodoš**		68·8	1.508	685	410	10	2.568	20.019	11.140	5.219	16.359	36.878	281.695	45
46	**Ljutomer—Gornja Radgona—drž. gran.—Radkersburg**		21·6	2.021	688	307	8	3.624	22.418	10.644	7.990	18.634	41.052	306.811	46
47	**Čakovec—Donja Lendava (22·0) sa prugom Zagreb gl. kol.—Čakovec (0·9)**		22·9	—	3.257	—	—	3.257	28.829	9.706	5.734	15.440	44.269	373.930	47
48	**Slovenska Bistrica—Slovenska Bistrica Mesto**		8·5	1	6.472	—	2	6.475	80.411	7.816	3.858	11.669	42.080	298.927	48
49	**Rogatec—Grobelno**		2·6	8.284	—	686	302	4.222	39.886	9.784	5.844	15.128	55.014	141.868	49
50	**Krapina—Rogatec**		19·4	2.500	—	721	41	3.262	30.210	9.188	1.984	11.067	41.277	341.999	50
51	**Celje—Velenje (37·5) sa prugom Pesje—Skale (1·7)**		39·2	3.555	—	1.054	12	4.621	52.980	33.861	13.157	47.018	99.948	811.865	51
52	**Velenje—Dravograd Meža**		36·7	1.696	891	—	44	2.631	19.991	8.840	5.117	13.457	33.448	256.720	52
53	**Dravograd Meža—drž. gran.**		1·5	1.832	—	967	—	2.799	18.579	7.975	11.604	19.579	38.158	286.788	53
54	**Ljubljana gl. kol.—Jesenice—drž. gr. kod Planice (98·4) sa prugom Ljubljana gl. kol.—Kamnik mesto (28·6)**		117·0	5.792	45	2.567	82	8.486	122.869	107.096	70.849	177.945	300.814	2,168.138	54
55	**Kranj—Tržič**		15·1	4.435	—	1	43	4.479	84.548	7.588	3.787	11.325	45.873	354.507	55
56	**Drž. granica (Rozenbah) Jesenice (7·1) sa prugom Jesenice—Bohinjsko Jezero—drž. granica (32·5)**		89·6	4.706	—	2.231	100	7.037	64.010	78.406	55.882	128.788	192.798	1,658.562	56
57	**Ljubljana gl. kol.—Novo Mesto**		75·2	8.170	178	1.887	106	5.286	67.872	57.855	30.274	88.129	156.001	1,250.117	57
58	**Novo Mesto—Bubnjarci**		49·9	8.102	—	1.458	102	4.657	41.569	49.687	10.949	60.086	101.605	871.289	58
59	**Karlovac—Bubnjarci**		27·6	8.689	—	1.498	86	5.273	45.296	68.858	13.199	77.052	122.348	1,060.625	59
60	**Grosuplje—Kočevje**		48·6	2.197	—	997	75	3.269	28.606	20.688	15.850	36.533	60.189	464.271	60
61	**Trebnje na Dolenjskem—Sevnica**		21·6	—	2.871	7	30	2.408	14.900	13.095	7.915	21.040	35.940	290.410	61
62	**Novo Mesto—Straža Toplice**		8·8	—	3.452	—	—	3.452	14.798	5.846	4.980	10.826	25.124	196.141	62
63	**Brezovica—Vrhnika**		11·5	—	3.209	—	234	3.443	42.021	5.046	1.969	7.015	49.086	352.570	63

Redni broj	829 Oznaka pruge normalnog kolosека Désignation des lignes de la voie normale	830 Prosečna eksploataciona dužina u *km* Longueur exploitée moyenne en *km*	831 Na 1 *km* eksploatacione dužine otpada — Par *km* exploité il revient putničkih vozova de trains de voyageurs	832 mešovitih vozova de trains mixtes	833 teretnih vozova de trains de marchandises	834 de trains *km* radnih vozova de trains de service	835 Svega Total	836 kolsko-osovinskih *km* — d'essieux-*km* putničkih kola de voitures	837 teretnih kola — de wagons à marchandises natovarenih chargés	838 praznih vides	839 Svega Total	840 Svega Total	841 bruto-tonskih *km* de tonnes-*km* brutes	№ d'ordre
	DIREKCIJA SUBOTICA — DIRECTION SUBOTICA													
64	Beograd—Novi Sad—Subotica—Kelebija drž. gran. (186·0) sa prugama: Novi Sad—Dunavska obala (1·8), Novi Sad—Novi Sad teretna stanica (2·8)	190·6[1]	5.078	272	2.247	66	7.668	182.884	106.822	45.524	152.846	285.180	2,528.928	64
65	Vinkovci—Dalj—Subotica—Horgoš drž. granica (159·8) sa prugama: Vinkovci—Vinkovci teretna stanica (2·5) i Dalj—Osijek gl. kol. (0·4)	162·5	8.488	176	8.725	80	7.869	77.227	185.169	187.288	372.452	849.679	2,681.768	65
66	Beograd—Slavonski Brod (221·4) sa prugama: Zemun—Zemun Pristanište (1·3) i Indija—Indija Selo (1·3)	224·0[2]	6.849	12	7.991	81	14.888	211.405	444.441	201.684	646.125	857.680	7,206.568	66
67	Beograd Dunav—Pančevo Predgrađe—Petrovgrad—Subotica (211·8) sa prugama: Orlovat—Rasputnica (Ečka) (0·6), Pančevo Predgrađe—Pančevo (5·5)	217·4[3]	3.891	151	1.253	169	5.444	79.408	58.665	89.185	97.850	177.258	1,887.246	67
68	Dragutinovo—Velika Kikinda—Jimbolia (C. F. R.)	88·2[3]	8.795	1.169	778	71	5.804	70.085	88.775	22.626	56.401	126.486	1,069.714	68
69	Velika Kikinda—Banatsko Arandelovo—Strig (M. Á. V.)	89·6[4]	1.460	604	—	8	2.067	21.214	2.668	3.434	6.102	27.816	200.154	69
70	Velika Kikinda—Nakovo drž. gran.	8·4	—	1.462	—	4	1.466	5.905	682	601	1.288	7.188	47.081	70
71	Beograd Dunav—Pančevo Predgrađe—Vršac (62·8) sa prugom: Rasputnica—Stražara br. 7 (0·5)	69·3[4]	3.468	246	1.713	227	5.654	77.388	90.079	48.784	138.868	216.201	1,624.430	71
72	Bezijaš drž. gran. Vračev Gaj Bela Crkva Vatin drž. gran.	54·1	1.750	1.083	85	275	3.178	34.792	21.401	19.660	41.061	75.858	575.712	72
73	Vršac—Sečanj—Petrovgrad	86·7	2.078	3	771	548	8.305	84.665	29.700	80.541	60.241	94.906	869.786	73
74	Vršac—Veliko Središte	18·4	—	1.471	—	—	1.471	5.894	1.878	1.404	3.282	9.176	64.919	74
75	Sečanj—Jaša Tomić—Ninčićevo	14·2	1.460	1.460	—	4	2.924	26.782	2.288	1.121	3.854	30.086	232.838	75
76	Kovačica—Samoš	20·9	462	1.460	—	1	1.923	26.602	0.588	2.495	9.021	35.628	267.492	76
77	Kovin Dunav—Vladimirovac	47·9	2.846	915	627	18	8.901	40.199	15.985	9.889	25.824	66.028	508.792	77
78	Alibunar—Čot	44·0	282	840	1	—	628	7.867	1.990	1.919	3.909	11.776	85.661	78
79	Čoka—Ilača	24·0	998	1.192	2	—	2.192	15.567	1.954	1.198	3.182	18.749	184.052	79
80	Novi Sad Senta Horgoš (134·5) sa prugom Senta Resp. (0·8)	135·3	2.805	407	569	14	8.795	47.298	15.045	8.564	23.609	70.907	540.218	80
81	Novi Sad—Titel—Tomaševac	64·7	8.149	102	724	269	4.440	44.896	28.274	21.087	49.361	98.757	684.481	81
82	Novi Sad—Sombor Ridica (119·4) sa prugom Novi Sad teretna stanica—Futog (3·1)	122·5	2.182	887	505	46	8.070	42.085	88.257	18.289	46.496	88.581	715.918	82
83	Subotica—Karavukovo—Bogojevo (100·6) sa prugom Bogojevo—Bogojevo Dunav (1·7)	102·3	1.292	298	889	18	2.486	21.776	25.185	16.968	42.098	68.874	477.889	83
84	Nova Palanka—Karavukovo—Bogojevo	34·9	—	1.758	852	28	2.188	24.488	12.186	8.285	20.871	44.864	389.011	84
85	Stari Bečej—Sombor—Bački Breg	117·4	2.048	401	907	26	3.877	84.184	89.847	28.858	68.705	97.889	779.680	85
86	Žedalik—Čantavir	8·0	—	2.920	—	—	2.920	21.448	4.195	3.246	7.440	28.888	226.158	86
87	Osijek gl. kol.—Vinkovci—Županja Sava	67·0	1.701	860	446	15	3.022	38.577	25.664	5.878	31.087	69.614	582.877	87
88	Vinkovci—Brčko	51·6	1.581	—	404	30	2.015	18.922	16.275	11.174	27.449	46.871	389.264	88
89	Odžaci—Sonta—Apatin—Sombor	52·4	501	1.734	—	27	2.262	22.924	10.848	7.488	18.826	41.250	311.988	89
90	Nova Palanka—Kula	48·4	—	1.958	391	25	2.874	21.195	11.644	5.028	16.672	37.867	291.858	90
91	Subotica—Subotički salaši	8·8	—	—	785	—	785	85	14.105	12.346	26.451	26.536	185.888	91
92	Slavonski Brod—Bosanski Brod	1·6	—	—	—	—	—	—	—	—	—	—	—	92
93	Batajnica—Boljevci	21·1	218	1.240	2	2	1.462	8.844	1.482	1.150	2.582	11.426	90.747	93
94	Ruma—Klenak—Šabac (82·7) sa prugom Klenak—Klenak Sava (1·9)	84·6	1.684	1.074	9	—	2.768	87.985	11.810	4.287	16.097	54.082	462.109	94
95	Ruma—Vrdnik (18·9) sa prugom Vrdnik—Vrdnik Ugljevik (1·6)	20·5	—	1.441	87	7	1.589	10.667	9.787	7.211	16.998	27.665	215.307	95
96	Sremska Mitrovica—Savska obala	8·8	—	—	—	—	—	—	—	—	—	—	—	96
97	Sremska Rača—Šid	28·4	729	1.458	18	76	2.271	20.832	9.281	6.978	16.209	37.041	276.279	97
98	Rača—Vukovar (25·4) sa prugom Vukovar—Vukovar predgrađe (2·9)	28·8	880	1.968	—	4	2.852	28.886	8.840	4.286	12.576	36.412	285.804	98
99	Beočin—Petrovaradin	17·2	10	1.810	2.218	15	4.143	19.442	87.085	28.543	65.628	85.070	681.495	99

[1]) Deo pruge Beograd—km 40·6 je u zajedničkoj upotrebi sa prugom Beograd—Slavonski Brod

[2]) Pri delenju uzeto je u obzir otstojanje samo do državne granice 88·2 *km*

[3]) Pri delenju uzeto je u obzir otstojanje samo do državne granice 89·6 *km*

[4]) Deo pruge Beograd Dunav—Pančevo Predgrađe je u zajedničkoj upotrebi sa prugom Beograd Dunav—Vršac

[1]) La partie de la ligne, allant de Beograd—à km 40·6, est en exploitation commune avec la ligne Beograd—Slavonski Brod

[2]) Lors de la division, on n'a tenu compte de la distance que jusqu'à la frontière de l'État, soit 88·2 *km*

[3]) Lors de la division, on n'a tenu compte de la distance que jusqu'à la frontière de l'État, soit 89·6 *km*

[4]) La partie de la ligne Beograd Dunav—Pančevo Predgrađe est en exploitation commune avec la ligne Beograd Dunav—Vršac

Rad vozova i kola na pojedinim prugama Parcours de trains et véhicules par lignes

Redni broj	829 Oznaka pruge uzanog koloseka (0·76*) Désignation des lignes de la voie étroite (0·76*)	830 Prosečna eksploataciona dužina u *km* Longueur exploitée moyenne en *km*	831 Na 1 *km* eksploatacione dužine otpada — Par *km* exploité il revient: vozних *km* de trains-*km*: putničkih vozova de trains de voyageurs	832 mešovitih vozova de trains mixtes	833 teretnih vozova de trains de marchandises	834 radnih vozova de trains de service	835 Svega Total	836 kolsko-osovinskih *km* — d'essieux *km*: putničkih kola de voitures	837 teretnih kola — de wagons à marchandises: natovarenih chargés	838 praznih vides	839 Svega Total	840 Svega Total	841 bruto-tonskih *km* de tonnes-*km* brutes	№ d'ordre
	DIREKCIJA BEOGRAD — DIRECTION BEOGRAD													
1	Paraćin—Zaječar	105·2	—	1.448	1.656	50	3.150	26.878	96.822	49.500	146.322	172.700	624.745	1
2	Paraćin—Stalać	21·6	—	—	999	—	999	3.189	49.618	28.097	77.715	80.904	308.663	2
3	Stalać—Kruševac—Čačak	105·8	2.744	—	1.787	244	4.775	70.485	121.442	57.765	179.207	249.692	916.193	3
4	Donja Čuprija—Paraćin	6·4	—	—	822	—	822	2.873	15.525	10.872	25.897	28.270	110.601	4
5	Donja Čuprija—Ravna Reka	81·1	—	—	6.170	14	6.184	25.160	111.977	97.695	209.672	284.832	801.244	5
	DIREKCIJA ZAGREB — DIRECTION ZAGREB													
6	Split—Sinj	45·0		1.744	34	4	1.782	18.777	5.975	4.445	10.420	29.197	124.867	6
	DIREKCIJA LJUBLJANA — DIRECTION LJUBLJANA													
7	Poljčane—Zreče	20·8		2.814	—	17	2.831	15.898	8.582	4.458	13.040	28.488	100.419	7
	DIREKCIJA SARAJEVO — DIRECTION SARAJEVO													
8	Beograd—Obrenovac	35·7	4.646	1.994	3.250	185	10.075	170.485	129.429	76.690	206.120	376.554	1,518.431	8
9	Obrenovac—Lajkovac—Čačak (121·9) sa prugom Obrenovac—Zabrežje (3·8) i Stalać—Čačak (0·8)	125·5	2.172	717	8.116	218	6.223	98.990	115.055	63.515	178.570	272.560	1,076.875	9
10	Čačak—Vardište—Most n/Drini—Sarajevo (245·0) sa prugom Međeđa—Priboj (43·2)	288·7	2.291	585	4.921	224	7.721	96.820	159.021	78.196	287.217	381.037	1,320.660	10
11	Slavonski Brod—Sarajevo (267·3)[1]) sa prugom Bosanski Brod—Bosanski Brod Sava (0·7)	268·0	3.085	402	8.070	95	11.652	187.853	890.806	185.895	575.701	718.554	2,894.680	11
12	Sarajevo—Uskoplje—Dubrovnik (281·0) sa prugom Ilidža—Ilidža Banja (1·2), Gabela—Metković (8·9), Hum—Blieće—Nikšić (87·4) i Uskoplje—Zelenika (65·5)	489·0	2.190	974	4.921	80	8.115	98.815	180.785	85.436	266.221	360.086	1,484.461	12
13	Doboj—Simin Han (66·7) sa prugom Karanovac—Gračanica (4·0)	70·7	658	1.789	4.424	77	6.898	70.819	136.865	90.295	227.160	297.479	1,150.382	13
14	Lašva—Jajce (98·8) sa prugom Donji Vakuf—Bugojno (10·6)	104·4	415	1.819	1.097	2	3.333	47.119	32.485	14.107	46.592	98.711	335.052	14
15	Semizovac—Ivančići	22·4	—	—	1.789	—	1.789	18.700	15.024	10.475	25.499	39.199	180.025	15
16	Podlugovi—Vareš	24·4	—	467	3.208	207	3.879	85.694	85.268	42.712	127.975	168.669	672.135	16
17	Mladenovac—Lajkovac—Valjevo	101·4	784		2.855	66	3.185	40.855	80.229	14.127	44.856	85.211	343.176	17
	DIREKCIJA SUBOTICA — DIRECTION SUBOTICA													
18	Petrovgrad—Klarija	67·1	1.482	—	780	42	2.254	28.818	19.049	12.718	31.762	60.580	211.121	18
19	Bosanska Rača—Ugljevik	48·7	22	1.476	496	85	2.079	17.951	15.678	15.690	31.368	49.317	176.827	19
20	Boljevci—Boljevci Savska obala	6·6	—	—	—	—	—	—	—	—	—	—	—	20
21	Slavonski Brod—km 1·850[2])	1·6	—	—	—	—	—	—	—	—	—	—	—	21
22	Crnja—Julijin Majur državna granica	1·8	—	—	—	—	—	—	—	—	—	—	—	22

*) U zgradama označena je dužina pojedinih pruga u kilometrima

[1]) Uračunata je dužina pruge Direkcije Subotica „Slavonski Brod—km 1·850" u iznosu 1·6 *km*

[2]) Rad ove pruge uračunat je u pruzi Slavonski Brod—Sarajevo, Sarajevske Direkcije

*) Entre parentheses est indiquée la longueur des lignes différentes en *km*

[1]) Y compris les parcours sur la ligne de la Direction Subotica „Slavonski Brod—km 1·850" de la longueur 1·6 *km*

[2]) Les parcours sur cette ligne sont insérés dans ceux sur la ligne Slavonski Brod—Sarajevo, de la Direction Sarajevo

Table 4

PRINCIPAL CIVILIAN AIRDROMES 373/

City	Location	Elevation	Type (ownership)	Size	Facilities
Belgrade (Zemun)	44°53' N. 20°24' E. On left bank of Sava, 1.9 miles S. of Zemun and 3.1 miles W. of Belgrade.	243 ft.	Customs Military	9,500 x 3,600 ft.	Hangars repairs radio: YTW
Borovo-Vukovar	45°25' N. 18°50' E. 3.1 miles NE of Vukovar and 1.9 miles NW of Borovo.	289 ft.	Private. S.A. Bata.	2,625 x 2,300 ft.	Hangar, repairs.
Dubrovnik (Gruda)	16 miles SE of Dubrovnik.	151 ft.	Public		Shelter, radio.
Ljubljana	46°03' N. 14°30' E. 3.7 miles E. of Ljubljana	932 ft.	Customs Military	4,260 x 3,400 ft.	Hangars, repairs, Radio: YPL.
Maribor	46°34' N. 15°39' E. 1.6 miles S. of Maribor.	899 ft.	Private. Aeroklub Kraljevine Jugoslavje "Nasha Krila". Military.	2,950 x 1,970 ft.	Hangar, repairs.
Nish-Medoshevac	43°19' N. 21°54' E. 1.9 miles NW of Nish.	682 ft.	Public, and Military	3,690 x 3,600 ft.	Hangar.
Osijek	45°32' N. 18°43' E. W. of Osijek	295 ft.	Public	1,800 x 985 ft.	Hangar, repairs,
Petrovgrad (Vel. Bechkerek)	45°23' N. 20°22' E. 0.6 miles of Petrovgrad.	279 ft.	Private. Aeroklub Kraljevine Jugoslavje "Nasha Krila".	753,470 sq. ft.	
Podgorica	42°26' N. 19°17' E. 0.3 miles E. of Podgorica.	184 ft.	Auxiliary	4,200 x 3,900 ft.	

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Sarajevo (Rajlovac)	43°45' N. 18°18'45" E. 6.8 miles W of Sarajevo.	1,634	Public and Military	3,770 x 3,525 ft.	Hangars, repairs. Radio: YTU. 3,000 gal. of fuel storage.
Skoplje	41°57' N. 21°26' E. 1.9 miles SE of Skoplje	787 ft.	Customs Military	4,920 x 4,590 ft.	Hangars, repairs, Radio: YTU
Skoplje	41°59' N. 21°28' E.			5,850 x 3,300 ft.	Seaplane base on Vardar river.
Sushak	45°18' N. 14°27' E. 6.8 miles from Sushak.	951 ft.	Public	3,280 x 1,150 ft.	Hangar.
Vrshac	45°07' N. 21°24' E. 1.9 miles NE of Vrshac	302 ft.	Private. Aeroklub Kraljevine Jugoslavje "Nasha Krila".	4,590 x 1,970 ft.	Hangar.
Zagreb	45°49' N. 16°02' E. 4 miles ESE of Zagreb.	400 ft.	Customs Military	3,280 x 2,950 ft.	Hangars, repairs. Radio: YTY.

Additional Aerodromes and Landing Grounds

Banja Luka	44°46'25" N. 17°12'25" E.	550 ft.	Very small	2,400 x 750 ft.	Few minor buildings.
Batulovce (Nish)	42°58'30" N. 22°04'40" E. (Town)	760 ft.	Good for dry season.	3,000 x 1,200 ft.	Emergency landing ground.
Bela Crkva	44°53'00" N. 21°25'00" E.	270 ft.		2,400 x 2,100 ft.	Four hangars, offices, barracks, ammunition and fuel storage.
Belgrade (Zemun)	44°50'00" N. 20°25'20" E.		Seaplane alighting area.		

Bijeljina	44°45'30" N. 19°12'50" E.			1,000 x 1,000 ft.	Emergency landing ground.
Bihach	44°47' N. 15°52' E.			2,310 x 1,650 ft.	Aerodrome
Bitolj	41°03'30" N. 21°22'40" E.	1,935 ft.		2,100 x 900 ft.	Few administrative buildings.
Bos. Gradishka	45°05'00" N. 17°18'40" E. (Town)				Emergency landing ground
Chachak (Prijeljina)	43°54'00" N. 20°26'15" E.	790 ft.			Landing ground.
Chachak (South)	43°52'40" N. 20°22'40" E.	780 ft.			Emergency landing ground.
Cattaro (Kotor) (Kumbor)	42°26'15" N. 18°36'15" E.		Ample	3-4 mi. long E-W, 1,000-2,000 yds. wide.	Six medium hangars. Three slipways, barracks, etc.
Cetinje	42°23'20" N. 18°55'50" E.				Landing ground.
Crikvenica	45°11' N. 14°14' E.		Civil	?	
Crnomouj (Meblika)	45°38' N. 15°20' E.			4,950 x 3,300 ft.	Aerodrome.
Ferizovich (Uroshovac)	42°22'20" N. 21°07'20" E.			2,700 x 2,400 ft.	Emergency landing ground.
Gospich	44°33' N. 15°22' E.			2,310 x 2,040 ft.	Aerodrome
Gradsko (Velos)	41°34'25" N. 21°57'40" E.				Emergency landing ground.
Kalinovic (1320)	43°31' N. 18°25' E.			?	Landing ground.

Karlovac	45°29' N. 15°35' E.			?	Landing ground.
Knin	44°02' N. 16°10' E.			3,300 x 2,310 ft.	Aerodrome
Knjazhevac	43°34'00" N. 21°14'35" E.				Emergency landing ground.
Kotor (see Cattaro)					
Kragujevac	44°00'45" N. 20°54'40" E.			3,300 x 2,100 ft.	Landing ground.
Kraljevo	43°43'50" N. 20°42'30" E.	665 ft.	Military	3,300 x 2,700 ft.	Aircraft works nearby
Krushevac	43°34'50" N. 21°19'15" E.		Used by A.F.	1,800 x 2,100 ft.	Landing ground.
Kumanovo	42°09'40" N. 21°40'00" E. (Town)	1,280 ft.		3,000 x 3,000 ft.	Emergency landing ground.
Martinci (Mitrovica)	45°00'25" N. 19°26'00" E.	230 ft.			Landing ground.
Milosevo	44°06'55" N. 21°09'00" E. (Town)		Reported used by Y.A.F.		Emergency landing ground.
Mostar	43°17'15" N. 17°48'55" E.	150 ft.	Military	4,200 x 2,700 ft.	Hangars, barracks, workshops.
Mostar (Kosor)	43°16'40" N. 17°50'45" E.	150 ft. (ca.)		2,700 x 4,500 ft.	Twelve hangars.
Nikshich	42°46'20" N. 18°57'10" E. (Town)			3,000 x 2,700 ft. (ca.)	Aerodrome
Nish (Drazhevac)	43°24'35" N. 21°47'20" E. (ca.)	520 ft.	Military	4,200 x 3,000 ft. (ca.)	Three hangars, workshops, barracks.
Novi Sad (1320)	45°15'40" N. 19°47'20" E.	270 ft.	Military	3,750 x 1,950 ft.	13 hangars, workshops, barracks. Ammunition storage. Und

Sarlinci (Nish)	43°11'40" N. 21°47'40" E. (Town)		Reported used by Y.A.F.	3,900 x 2,100 ft.(ca.)	Emergency landing ground.
Skrac	42°42' N. 18°17' E.			?	Aerodrome
Shibenik (Vodice)	43°45'20" N. 15°47'15" E. (ca.)		Military Seaplane Station		Two hangars, concrete slipway.
Shibenik (Trulukve)	43°42' N. 15°55' E.			4,050 x 4,050 ft.	Aerodrome
Sinj	43°42'20" N. 16°39'30" E. (ca.)	1,070 ft.		3,600 x 1,350 ft.	Emergency landing ground.
Split	43°32'00" N. 16°18'00" E.		Military Seaplane Station	7,920 x 2,400 ft.	3 hangars, repair shop, a broad slip-way, barrack accommodation
Strumica	41°26'45" N. 22°37'30" E. (Town)				Emergency landing ground.
Tetovo	41°56'45" N. 21°00'00" E. (ca.)	1,480 ft.		3,000 x 2,550 ft.	Emergency landing ground.
Titel	45°12'20" N. 20°17'30" E.				Emergency landing ground.
Tuzla	44°32'20" N. 18°40'40" E. (Town)		Reported used by Y.A.F.		Emergency landing ground.
Valandovo	41°18'00" N. 22°34'30" E.	785 ft.	Reported used by G.A.F.		Landing ground.

					ground fuel storage. Ikarus aircraft factor here.
Novo Mesto	45°47' N. 15°10' E.			2,080 x 660 ft.	Landing ground.
Orebich	42°58' N. 17°13' E. (ca.)			?	
Panchevo	44°54'00" N. 20°42'20" E. (ca.)	280 ft.		4,500 x 3,000 ft. (ca.)	Four hangars barracks. Single engined fighter school.
Petrovac (Skoplje)	41°56'20" N. 21°36'20" E. (Town)		Used by A.F.	2,400 x 2,400 ft.(ca.)	Emergency landing ground.
Pirot	43°08'50" N. 22°34'50" E. (Town)				Emergency landing ground.
Pozhega	43°50'00" N. 20°03'30" E.	1,000 ft.	Used by A.F.		Landing ground.
Prilep (Malo Kojnari)	41°21'00"N. 21°29'10"E.	2,030 ft.	Used by G.A.F.	3,000 x 3,000 ft.	Aerodrome
Prishtina	42°40'00" N. 21°09'30" E. (Town)		Reported used by Y.A.F.	2,700 x 2,100 ft.	Landing ground.
Ruma	44°57'20" N. 19°47'45" E.	270 ft.		1,800 x 2,400 ft. ("L" shaped)	Emergency landing ground.
Samobor	45°47' N. 15°37' E.			3,900 x 1,980 ft.	Aerodrome
Sarajevo (Butimir)	43°49'20" N. 18°19'15" E. (Town)			3,000 x 2,700 ft.(ca.)	Emergency landing ground.

Appendix B

S H I P P I N G

1. PRINCIPAL RIVER PORTS 374/

On the Danube

Bezdan. 883 miles from Sulina on left bank at entrance of King Peter Canal. Length of port 250 meters. Width of the river 400 meters. Frontier port with offices for supervision of navigation, police, registry and agencies of various ship companies. Several landing pontoons and storehouses. Ferry to Batina. Winter anchorage. Railway station at town of Bezdan 5 miles east.

Equipment in 1936

Type of boat	Number	Total h.p.	Maximum passenger load	Maximum capacity in m. tons
tugs	14	1,970	--	--
passenger boats	2	160	312	--
freight & passenger	2	75	--	125
motor boats	10	233	--	--
iron barges	34	--	--	10,736
wooden barges	90	--	--	20,266
lighters and long boats	18	--	--	263
Total	170	2,438	312	31,390

Batina. 883 miles from Sulina on right bank opposite Bezdan. Bank faced with stone for 1,500 meters. Signal station for river traffic. Normal gauge railway connected with the port. Railway station and storehouse. Ferry to Bezdan.

Apatin. 870 miles from Sulina. Left bank. Width of river 500 meters. Normal gauge railway traverses the port. Landing pontoon. Several shipping agencies have offices there. Storehouses. Central office of Fishing Organization and storage places for fish. Ship workshop. Brick factory about 2 miles downstream.

Bogojevo. 851 miles from Sulina. Left bank. Width of river 600 meters. Large island opposite the port. Length of port 200 meters. Standard gauge railway connected to port. Ferry to Erdut. Railway bridge over the Danube.

Vukovar. 832 miles from Sulina. Right bank. Width of river 550 meters. Length of port 1,200 meters. Customs house. Agencies of various shipping firms. Several landing pontoons and storehouses. Port standard gauge railway station in Novi Vukovar above the town. Railway station Stari Vukovar, 2 miles south. Ship workshop. Coaling station. Ferry to Plavna.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons.
motor boats	15	384	--	--
wooden barges	5	--	--	134
lighters and long boats	13	--	--	115
Total	33	384	--	249

Beochin. 789 miles from Sulina. Right bank. Width of river 650 meters. Length of port 300 meters. Cement loading port connected by a narrow gauge line with the factory. Landing pontoon. Standard gauge railway station, 2.5 km. away. Ferry to Stari Futog.

Novi Sad. 782 miles from Sulina. Left bank at entrance to King Alexander Canal. Width of river 300 meters. Normal gauge line connected with the winter anchorage, upstream. Length of port 1,100 meters. Regional port headquarters. Customs house. Agencies of various shipping firms. Several landing pontoons and storehouses. Ship coaling station. Silk factory. Winter anchorage. Ferry to Kamenica. Two bridges over the Danube -- railway and vehicular -- to Petrovaradin.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons.
tugs	5	760	--	--
passenger boats	3	200	220	--
motor ferries	1	40	400	--
motor boats	27	660	--	--
iron barges	26	--	--	8,296
wooden barges	20	--	--	650
lighters and long boats	80	--	--	622
Total	162	1,660	620	9,568

Zemun. 833 miles from Sulina. Right bank at confluence of Danube and Sava. Width of river near port 670 meters; down stream, near Ratno Ostrvo (island) 320 meters. Length of port 1,300 meters, 850 meters of which faced with stone. Standard gauge railway port station. Agencies of various shipping firms. Several landing pontoons and storehouses. Ship workshop. Saw mill.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
tugs	1	40	--	--
freight & passenger	1	45	67	--
motor ferries	1	24	125	25
motor boats	17	143	--	--
wooden barges	11	--	--	2,320
lighters and long boats	52	--	--	303
Total	83	252	192	2,648

Belgrade. 727 miles from Sulina. Right banks of Danube and Sava, at mouth of Sava. See description of Sava port below.

Pancheyo-Danube. 716 miles from Sulina. Left bank at mouth of the Tamish river. Landing pontoon.

Pancheyo-Tamish. 1.9 miles up stream on left bank of the Tamish. Width of the river at port 25-30 meters. Length of port 2,500 meters, 350 meters of which faced with stone. Wooden pier 80 meters. Normal gauge railway to port. One of port administration headquarters. Customs house. Agencies of shipping firms. Landing pontoons and storehouses. Winter anchorage. Ship workshop. Drying plant for corn. Silk factory.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons.
tugs	9	2,796	--	--
motor boats	13	239	--	--
iron barges	29	--	--	16,316
Total	51	3,035	--	16,316

Smederevo. 690 miles from Sulina. Right bank opposite large island. Width of river 600 meters. Length of port 2,400 meters, 850 meters of which faced with stone. Stone pier. Normal gauge line connected to port. Customs house. Agencies of shipping firms. Landing pontoons and storehouses. Normal gauge railway ferry terminal. Ferry to Kovin. "Sartid" shipbuilding works, including repair of railway cars and locomotives, and iron constructions.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
iron barges	1	--	--	600
passenger boats	1	60	160	--
motor boats	2	10	--	--
wooden barges	11	--	--	236
lighters and long boats	30	--	--	327
Total	45	70	160	1,163

Kovin. 690 miles from Sulina. Right bank opposite Smederevo. Width of river 800 meters. Length of port 550 meters. Normal gauge railway connected to port. Landing pontoon. Shipping agency. Normal gauge railway ferry terminal. Ferry to Smederevo. Winter anchorage, at Ponjavica two miles downstream.

Dubravica. 684 miles from Sulina. Right bank about 1 mile below mouth of Morava river. Width of the river 800 meters. Length of port 250 meters. Narrow gauge railway (0.76 cm) connected to port. Narrow gauge (0.60 cm) railway east to Klenovac coal mine. Shipping agency. Landing pontoon. Ferry to Ostrovo and Brza Vrba.

Veliko Gradishte. 658 miles from Sulina. Right bank above mouth of Pek river. Width of the river 900 meters. Length of port 550 meters. Bank faced with stone. Frontier port with port administration headquarters, customs house, police. Agencies of various shipping firms, landing pontoon, and several storehouses.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
wooden barges	3	--	--	103
motor boats	2	108	--	--
lighters and long boats	14	--	--	214
Total	19	108	--	317

Dobra 634 miles from Sulina. Right bank. Width of the river 650 meters. Change in the towing system from Dobra to Djerdap. Landing pontoon. Narrow gauge railway to mine.

Donji Milanovac. 615 miles from Sulina. Right bank. River width 750 meters. Length of the port 150 meters. Bank in part faced with stone. Shipping agency. Landing pontoon. Ore loading station. Cable mine railway to Majdanpek.

Sipski Kanal. 584 to 603 miles from Sulina. Right bank. Locomotive ship towing installation for 1,800 meters.

Kladovo. 578 miles from Sulina. Right bank. Width of the river 900 meters. Length of the port 150 meters. Port headquarters. Locomotives for ship towing. Change in towing system from Djerdap to lower Danube sector. Customs house. Shipping agency. Landing pontoon. Ferry to Turnu Severin. Winter anchorage.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum Capacity in m. tons.
wooden barges	1	--	--	38
motor boats	1	15	--	--
lighters and long boats	4	--	--	12
Total	6	15	--	50

Prahovo. 535 miles from Sulina. Right bank. Width of the river 900 meters. Length of the port 1,700 meters. Normal railway line connected to port. Frontier port. Port administration headquarters, customs house, police. Shipping agency. Landing pontoon. Coal loading ramp. Ship supply station.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
wooden barges	5	--	--	294

On the Sava

Sisak. 367 miles from the Danube. On both banks of the Kupa, right bank tributary. Width of the river 140 meters. Length of port 1,500 meters, 500 of which faced with stone. Normal railway line connected to port. Port administration headquarters. Customs house. Shipping agency. Storehouses. Grain elevator. Crane. Railway and vehicular bridges over the Kupa. Winter anchorage.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
tugs	3	160	--	--
motor boats	3	370	--	--
iron barges	3	--	--	1,060
wooden barges	5	--	--	1,413
lighters and long boats	99	--	--	1,192
Total	113	530	--	3,665

Caprag. 367 miles from the Danube. On right bank, below mouth of the Kupa. Petroleum refinery of Shell Co. "Drah" lumber company. Normal gauge railway facilities.

Bosanski Brod. 224 miles from the Danube. On right bank. Width of river 250 meters. Length of port 750 meters. Narrow gauge railway (0.76 cm) connected to port. Connected with the normal and narrow gauge railway stations. Port administration headquarters. Customs house. Shipping agency. Landing pontoon. Storehouses. Coal supply station. Ferry for Slavonski Brod. Winter anchorage. Standard Oil Company refinery.

Slavonski Brod. 223 miles from the Danube. On left bank. Length of port 1,500 meters, 1,000 meters of which are stonefaced. Shipping agency. Landing pontoon. Storehouses. Two cranes for lumber. Connected with normal gauge railway station 1.2 miles away. Ferry for Bosanski Brod. Railway bridge over the Sava.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
wooden barges	22	--	---	1,413
lighters and long boats	29	--	---	214
Total	51	--	---	1,627

Brchko. 140 miles from the Danube. On right bank. Width of river 250 meters. Length of port 500 meters. Shipping agency. Landing pontoon. Storehouses. Normal gauge railway station, about 1 mile away. Winter anchorage. Ferry for Gunja.

Bosanska Racha. 110 miles from the Danube. On the right bank at mouth of Drina river. Width of the river 240 meters. Length of the port 400 meters. Narrow (0.76 cm) gauge line connected to port. Shipping agency. Landing pontoon. Storehouse. Coal supply station. Ferry for Slavonska Racha. Mine cable railway over the Sava.

Sremska Mitrovica. 85 miles from the Danube. On the left bank. Width of the river 180 meters. Length of the port 1,000 meters, 800 meters of which are faced with stone. Port administration headquarters. Shipping agency. Landing pontoon. Storehouses. Railway station 1.? miles away. Tannine factory and saw mill connected with railway. Ferry for Podrinska Mitrovica. Pontoon bridge. Winter anchorage.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
motor barges	1	60	--	163
wooden barges	41	--	--	3,845
lighters and long boats	83	--	--	852
Total	125	60	--	4,860

Shabac. 64 miles from the Danube. On right bank. Width of river 600 meters. Length of the port 1,000 meters. Narrow (0.76 cm.) gauge railway in the port, Shipping agency. Landing pontoon. Storehouses. Ferry to Klenak. Bridge over the Sava for normal gauge railway and road.

Klenak. 64 miles from the Danube. On left bank opposite Shabac. Length of port 450 meters. Standard gauge railway connected to the port. Landing pontoon. Ferry to Shabac.

Zabrezhje-Obrenovac. 84 miles from the Danube. On right bank. Length of port 350 meters, 130 meters of which stone-faced. Narrow gauge (0.76 cm) railway connected to port. Shipping agency. Landing pontoon. Storehouses. Sawmill. Terminal of the railway ferry between Z-O and Boljevci on the left bank. Ferry to Boljevci.

Belgrade, Sava port. From 0 miles to 3.7 miles from the Danube. On right bank. Length of port 6,000 meters, in part stone-faced. Width of river 300 meters. New port under construction in 1939. Normal gauge line serves almost entire length of port. Freight railway stations "Belgrade-Sava" and "Shest Topola", and a narrow gauge freight station at Bara Venecija.

Port administration headquarters. Customs house. Police Bureau for registering and weighing ships. Many shipping agencies. Nine landing pontoons of the State River Navigation System and several belonging to private firms. Considerable number of storehouses. Floating crane, dredger for gravel, two bank dredgers for gravel. Sugar refinery at Chukarica with two cranes for sugar beets. "Vapa" paper factory with crane. Coaling station at Bara Venecija. Several small ship workshops. Ferry Bara Venecija--Zemun. Railway bridge over the Sava. Near the main railway station a high vehicular suspension bridge, destroyed by the Germans, now probably repaired. Winter anchorage at Chukarica. Ship construction firms with large equipment. Shell Oil Co. refinery. Sawmill "Makish". Winter anchorage Bezhanija. Workshops for repairing ships, belonging to State River Navigation system. Individual sections of the port (from the Danube) follow in this order: customs port, passenger port, Bara Venecija, vehicular suspension bridge (destroyed in the war), railway station Belgrade-Sava, Sava railway bridge, Shest Topola, mouth of the Topchider river, Chukarica.

Belgrade, Danube port. Length of the port 3,500 meters. Average width of the river 650 meters. Normal gauge railway with freight stations Belgrade-Klanica and Danube. Individual sections of the port from west to east are: fishing port, coal port, sawmill, slaughter house, Karaburma industrial area, Ilich textile factory. Customs house. Several landing pontoons and loading ramps. Storehouses. Floating crane. Various factories. Ferry for Borcha. Railway and vehicular bridge over the Danube, connecting Belgrade and Panchevo.

(1320)

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
tugs	75	30,416	-----	------
passenger boats	27	8,120	11,222	------
combined freight and passenger	2	565	900	------
motor barges (steam and Diesel)	12	3,182	-----	2,790
motor ferries	1	60	-----	15
motor boats	143	2,321	-----	------
iron barges	543	------	-----	337,181
wooden barges	53	------	-----	6,982
lighters and long boats	77	------	-----	135
Total	939	44,664	12,122	347,740

On the Drava

Osijek Gornji Grad. (Osijek Upper Town). 14 miles from the Danube. Mouth of the Drava 859 miles from Sulina. On right bank. Width of the river 140 meters. Length of the port 300 meters. Normal gauge railway station 1.2 miles south. Frontier port administration headquarters. Customs house. State River Navigation System agency and landing pontoon. Agencies of various private shipping firms. Winter anchorage. Ferry for Tvrdjavica.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
motor barges	1	50	--	10
tugs	1	180	--	--
motor boats	14	295	--	--
iron barges	5	---	--	2,825
wooden barges	2	---	--	698
lighters and long boats	30	---	--	163
Total	53	525	--	3,696

Osijek Donji Grad (Osijek Lower Town). 11 miles from the Danube. Width of the river 220 meters. Length of port 350 meters. Normal gauge railway connected to port. Landing pontoon. Ferry for Podravlje. Railway and road bridges over the Drava.

On the Tisza

Senta. 76 miles from the Danube. Right bank. Width of river 220 meters. Length of port 1,000 meters, 900 of which stone-faced. Frontier port administration headquarters. Customs house. Agencies of various shipping firms. Landing

pontoon. Storehouses. Normal gauge railway station about 1 mile away. Railway bridge over the Tisza. Sawmill.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. ton
lighters and long boats	54	---	----	369
Total	54	---	----	369

Stari Bechej. 45 miles from the Danube. On left bank, at entrance to King Peter Canal. Width of river 180 meters. Length of port 220 meters. Shipping agency. Landing pontoon. Storehouses. Normal gauge railway station 1.2 miles away. Ferry. Winter anchorage.

Novi Bechej. 40 miles from the Danube. On left bank. Width of river 300 meters. Length of port 120 meters. Shipping agency. Landing pontoon. Storehouses. Ferry for Stari Bechej. Winter anchorage. Normal gauge railway station at Vranjevo, 1.9 miles away.

Titel. 6.2 miles from the Danube. On right bank. Width of river 250 meters. Length of port 800 meters. Entrance to the Begej Canal, left of port. Port administration headquarters. Agencies of various shipping firms. Landing pontoon. Storehouses. Normal gauge railway station 1.9 miles away. Winter anchorage. Coaling station. Railway and road bridge over the Tisza. Mouth of Tisza 755 miles from Sulina.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
passenger boats	3	282	344	--
motor boats	11	255	---	--
iron barges	2	---	---	258
wooden barges	17	---	---	1,703
lighters and long boats	52	---	---	299
Total	85	537	344	2,260

On the Begej

Petrovgrad (Veliki Bechkerek). 19 miles from the Danube. On both banks. Width of river 30 meters. Length of port 6,000 meters. Frontier port headquarters, customs house. Shipping agency. Landing pontoon. Normal and narrow gauge

railways connect with the port. Sugar refinery, brewery, flour mill, oil, textile and other factories. Two railway bridges and two vehicular bridges over the Begej. Five ferries. Winter anchorage.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
tugs	1	120	--	--
passenger boats	1	40	120	--
motor ferries	1	20	--	15
motor boats	9	358	--	--
wooden barges	4	--	--	144
lighters and long boats	43	--	--	400
Total	59	438	120	559

On the Skadar (Scutari) Lake

Virpazar. At opposite end of the lake from Scutari, 21 miles by road north of Bar, on the Adriatic coast. Narrow gauge railway Virpazar- Bar.

Equipment in 1936

Type of boat	Number	Total H.P.	Maximum Passenger Load	Maximum capacity in m. tons
tugs	2	180	--	--
passenger boats	3	145	180	--
motor barges	2	50	--	40
iron barges	3	--	--	244
lighters and long boats	31	--	--	223
Total	41	375	180	507

Appendix B

2. MARITIME SHIPPING */

The bulk of pre-war Yugoslavia's water-borne foreign commerce passed through foreign ports (Trieste, Fiume, Salonika) or travelled on Danubian steamers. Trieste is the natural port for the entire region of Yugoslavia served by the international main line railways system; and Salonika for the southern part of the country. Thus the domestic ports on the Adriatic littoral handled but a small fraction of the overseas trade. Only three of them, Sushak, Split and Kotor, have port facilities of importance, and only Split has really adequate rail connections with the interior. All information below dates from prior to the German invasion.

1. Bakar (Buccari)

General. Bakar, a town with about 2,300 inhabitants, lies at the northwest end of Bakar Bay (Bakarski Zaliv).

Chart. H.O. 3956.

Location. 45°18' N., 14°32' E.

Depths. Bakar Bay has depths from 12 to 20 fathoms (21.9 to 36.6 m.), but off the northwestern side of the entrance is a rocky shoal with only 5 fathoms (9.1 m.) over it. Bakar Harbor, in the northwestern end of the bay, has sufficient room for large vessels.

Anchorage. Vessels anchor southeast of the light on the health office quay in about 14 fathoms (26.6 m.) mud bottom, with strong mooring lines run to shore to secure against the bora (a violent north or northeast wind). The sirocco (a south-easterly wind) blows up a heavy sea in the northwest extremity of the bay. There are five mooring buoys in this part of the bay, one about 400 yards southeast of the above-mentioned light, and the others on the western side of the bay near Mandrac Point.

Pilotage. No data. Presumably pilotage is unnecessary.

Quayage. The quays along the shores at the head of the harbor are accessible only to small vessels. On the west side of the bay, about 350 yards southeastward of Mandrac Point, there is a quay with a least depth of 23 feet (7.0 m.).

Harbor Craft. No data.

Supplies. Limited quantities of provisions are [illegible] in the.

(1320)

*/ Prepared by the South European Section of the Military Intelligence Service in June, 1942.

Repairs. The Adriatic Shipbuilding Yard at Kraljevica (Porto Re), a village on the eastern side of Bakar Bay (45° 16' N., 14° 35' E.), has a floating dock, and can carry out repair work and construct small vessels.

Communications. The town of Bakar has rail connections with Fiume, and is a port of call for local steamers. It is on the main coastal road which runs 470 miles from Kotor and Sushak, via Dubrovnik, Metkovich, Split, Shibenik, Gospich, Otochac, Senj and Novi. This is a second class road, often narrow, winding and unsuited to heavy motor traffic, but for most of its length it is rated as good to excellent as second-class roads go.

2. CRIKVENICA (Crikvenica).

General. Crikvenica is a small seaside resort, with a permanent population of about 5,500.

Charts. H.O. 3956, B.A. 2711.

Location. 45° 10' N., 14° 42' E.

Depths. There are depths of about 13 feet (4.0 m.) in the harbor, and very great depths in the anchorage proper.

Anchorage. Crikvenica has a small harbor, formed by two jetties, which is well sheltered from all winds but is accessible only to small vessels. The holding ground off the port is good but too exposed to the bora and sirocco to be used as an anchorage. Large vessels anchor off the small group of houses at Drazica, about three miles northwestward of Crikvenica, where there is a mole. The anchorage is large enough to accommodate the entire British Mediterranean Fleet, and is practically land-locked. It has a small exit to the north, which could easily be closed in the event of war, and a larger exit to the southwest. It is not considered a good fleet anchorage because it

is too deep and is subject to boras.

A small landing field, used by privately owned planes, is located about 3/4 mile inland, (4 miles by road). It is considered that seaplanes could land in the anchorage, but that it would not make a good base because of the bora.

Pilotage. No data.

Quayage. The larger of the two jetties mentioned above has a length of 225 yards and a depth alongside of 8 ft. 10 in. There are no lifting appliances. There are several short jetties along the promenade, but there is seldom more than a depth of 2 ft. alongside.

Harbor Craft. About 20 small sailing craft are available, some of which are fitted with auxiliary engines.

Supplies. Fuel and water are plentiful.

Repairs. No data.

Communications. There is a local telephone station. V/S stations could be established along the coast, using re-transmitting stations.

The railhead is at Place and connects directly with most European towns. The train service is not frequent. Busses run in conjunction with the trains to and from Crikvenica.

There is a small steamer ferry service connecting with Novi, Kraljevica, Sushak, and the island of Krk.

3. DUBROVNIK (Ragusa)

General. Dubrovnik has about 12,000 inhabitants and is the commercial center of southwestern Yugoslavia. The city's quays and cargo-handling facilities are insufficient to meet modern needs, so that Gruzh (officially known as Dubrovnik II), is used as the seaport of Dubrovnik proper.

Chart. H.O.1582. (Dubrovnik Roadstead).

Location. 41° 33' N., 18° 07' E. (Roadstead).

Depths. The roadstead of Dubrovnik, lying between the town and Lacroma Island, has depths of 8 to 15 fathoms (14.6 to 27.4 m.). Port Cossone, on the eastern side of the city, has a depth of about 2 fathoms (3.7 m.).

Anchorages. Port Cossone provides partly sheltered anchorage for a few small vessels. Larger ships anchor in the roadstead, but the bottom is unreliable, there is no protection against southerly winds, and south-westerly winds bring in heavy seas. Vessels are somewhat sheltered from southeastern winds and seas under the lee of the island with shorefasts run to the southeast. This anchorage is relatively safe only during the summer season.

Pilotage. No data.

Quayage. There is a short quay on the western side of Port Cossone. No data is available regarding wharves at Dubrovnik proper.

Harbor Craft. No data.

Supplies. Water and a limited supply of provisions are available. About 200 tons of coal are usually in stock.

Repairs. Limited repairs could be made by the firm of Orlich and Musladin.

Communications. There are telegraph and telephone offices in the city. Dubrovnik is on the main coastal road from Sushak to Kotor, and also on the narrow-gauge (76 cm.) single-track railroad line Dubrovnik - Mostar - Sarajevo - Belgrade. There is a small military aerodrome at Dubrovnik. (42° 23' N., 18° 22' E.,).

4. DUBROVNIK II. (GRAVOSA, GRUZH)

General. Dubrovnik II, is important only because it is the port for Dubrovnik, three miles to the south. It exports large quantities of Bosnian timber and was once the chief port of entry of British imports (mainly coal). The town is about 2 miles long but only one street wide. It has approximately 2,000 inhabitants.

Chart. B.A. 3675.

Location. 42° 40' N., 18° 07' E.

Depths. The mid-channel depths in the port range from 16 fathoms (29.3 m.) in the entrance to 2 fathoms (3.7 m.) at the head. There are several shoals and mud flats along the shores.

Anchorage. Anchorage is prohibited in the port. If no berth is available at the quays vessels usually anchor northward of Daksa Islet. Anchorage westward of the islet, however, affords better protection against northeasterly winds during local thunderstorms. It is reported that the prevailing character of the bottom is soft mud and sand, and that the holding ground is poor.

(1320)

Pilotage. Pilotage is not compulsory. The harbor master assists in berthing vessels alongside the wharves.

Quayage. The total length of quays for loading and unloading for overseas trade is 2,750 ft. with depths of 20-22 ft. alongside.

Large vessels berth at the Stara Obala or Zheleznichka Obala (old or railroad quay), which is 1,960 ft. in length, and has about 3,300 ft. (1,000 m.) of narrow-gauge railroad. This wharf is also equipped with two old electric cranes movable to the extent of 60 meters. Their capacity is 2.5 metric tons and their height 5 meters. They are not in use, however, because of the lack of power. Loading and unloading is normally carried out by ships' winches.

A second deep-water wharf is the Nova Obala, or New Quay, 790 ft. in length. Southeast of the Nova Obala is the Nolo Potka or Gat Potka, a wharf about 230 ft. in length, with a depth of 15 ft. alongside.

Since the large quays are connected by railroad lines, cargo can be handled directly from ship to car. Lighters handle the cargo of vessels unable to berth at the quays.

Harbor Craft. Two lighters of about 20 tons capacity each, and one small tug are attached to the port.

Supplies. Fresh provisions are obtainable in limited quantities. Water is available at hydrants on the quays. The water is suitable both for drinking and for boilers, but the supply is sometimes limited in hot, dry summers. Bunker coal can be obtained from the firm of Banac and Rusko. Normally about 10,000 tons are kept in stock, of which about 400 tons are local coal, the remainder being German Westphalian. Coal is loaded in baskets from the north side of the railway wharf.

The Shell Company has five tanks of 400 tons' capacity each, three being used for fuel oil and two for parafin. No Diesel oil is normally stocked. A pipe line on the quays can deliver fuel oil at the rate of about 50 tons per hour.

Repairs. There are no floating docks or slips. Limited repairs could be made at Dubrovnik.

Communications. Dubrovnik II is connected with all parts of Europe by the government-owned telegraph system. A low-power, unreliable radio station is located in the town, and there are telephone facilities.

Dubrovnik II is normally the regular port of call for Adriatic steamers, and is a terminus of the Dalmatian railroad, which is connected with the general European system. The lines from Dubrovnik II to Sarajevo and to Kotor are, however, narrow-gauge.

Dubrovnik and Dubrovnik II are connected by electric tramway and autobus service. Dubrovnik II is on the main coastal road from Sushak to Kotor. There is also a good road to Sarajevo.

(1320)

5. KOTOR (CATTARO)

General. Kotor ranked fifth among the major ports in pre-war Yugoslavia's foreign trade, and was the site of the country's most important naval base. The Gulf of Kotor (Kotorski Zaliv or Boka Kotorska) is a completely land-locked harbor, comprising four separate but connected basins totalling over 10 square miles and forming one of the best bases for a large fleet in the Mediterranean. The four basins are Topla, Tivat (Teodo) and Risan (Risano) Bays, and the Gulf of Kotor proper. The latter name applies to the four basins as a whole, and more specifically to the easternmost basin at the head of which stands the town of Kotor.

Kotor is very easily defended and secure from seaward observation and attack. It is easy of access, close to the open sea, free from swells, and has good holding ground. It suffers from the frequent occurrence of violent squalls from the mountains in all seasons, and its development has been retarded by lack of railway communications. Pre-war Yugoslavia's naval installations at the Gulf of Kotor included an important naval air station, torpedo, mine and ammunition depots and extensive repair facilities.

Charts. B.A. 419 and B.A. 1463.

Location. 42° 24' N., 18° 33' E.

Depths. The controlling depth at low water in the channels of approach and entrance is 12 to 15 meters.

Currents. The currents are very irregular and are dependent upon the tides; in the summer they are rather weak. On the eastern side of the entrance there is often a northwesterly current with a drift of at least 2½ knots. After a long and heavy rainfall a noticeable current arises which sets toward the western side of the entrance; in the narrow passages of the gulf it frequently attains a velocity of 2½ knots.

Anchorage. With the exception of the entrance, all of the basins afford good anchorage for vessels of even the largest size and draft. Near the center of the basins the bottom is generally mud, but near the shores the mud is mixed with sand and shells. As a rule the preferred anchorage in a bora or during southeasterly winds is along the eastern shore. Great care must be exercised in the choice of an anchorage because of the violent bora and sirocco squalls which sweep down the mountains. Southerly and southwesterly winds blow strongly only in the entrance and in Topla Bay. Anchorage is prohibited in certain areas near the telegraph cables and the submarine mining ground, etc. 375/

Pilotage. Information is available only for the port town of Kotor. Pilotage there is advisable but not compulsory. A pilot will meet an incoming vessel at Port Rose Wharf, at the entrance into Boka Kotorska, opposite the port of Herceg-novi.

Port Facilities. Quayage cranage, harbor craft, etc., in the various port villages, are as follows:

(1320) A. In Topla Bay, the western basin of the Gulf of Kotor.

a. Hercegnovi, (Castelnuovo, or Ercegnovi) is a small harbor protected by two moles with a depth of 15 ft. in the center. There are 140 yards of quayage, of which 60 yards are alongside the west side of the larger east breakwater. The port has a few lighters, fitted for disembarking troops and animals, one tug, and a small slip for repairing the local lighters. The town is a port of call for mail steamers, and is on the narrow-gauge line from Zelinka to Dubrovnik.

b. Port Rose, opposite Hercegnovi, is a small bay about 250 yards across at the entrance, with deep water within and surrounded by steep cliffs. There is one small quay suitable for destroyers to go alongside. Two mooring buoys are off the village which stands at the head of the port.

c. Zelinka (Zelenika) has a small quay about 110 yards long, with 21 ft. of water alongside, where 2,000-ton steamers can berth. A short distance back of the quay is the terminal station of the narrow-gauge line to Dubrovnik. Zelinka is the region's main timber exporting port.

d. & e. Djenovichi and Kumbor. These two villages have between them some eleven jetties and stone moles which can be used for landing purposes. A floating sheer-legs is usually moored off the W/T office. There is a travelling steam crane at the naval air station on Djenovichi Point (42° 26' N., 18° 36' E.), but it is not known whether this crane can be used for unloading ships.

B. In Tivat (Teodo) Bay

a. Tivat Dockyard is the site of the navy yard, and a port for mail steamers. A mole projects westward about 200 yards, then southward about 300 yards, forming, with another mole to the southward, which projects towards the head of the former, a basin with depths of 10-18 ft. Southward of this basin is a stone pier, with a light railway along it, which projects 250 yards and has a depth of 24 ft. alongside its outer end and at least 15 ft. at the shore end. There is a stone landing place a short distance to the south of the pier, which has a depth between 12 ft. and 18 ft. alongside. (See Repairs, below.)

The naval dockyard, which is about 150 yards wide, stretches along the shore, north and south, for about 500 yards. There are three slips for destroyers and two floating docks, details concerning which will be found under Repairs, below. In the harbor are two self-propelled floating cranes of about 15 or 45 tons capacity.

b. Lukovich, south of Tivat, has a town pier, alongside which ships, boats, can go.

C. In Risan (Risano) Bay

a. Risan or Risano, a village near the northern end of Risan Bay, is a port of call for mail steamers. Its harbor is formed by a hook-shaped breakwater with depths alongside of 9 ft. to 13 ft. Local steamers make fast
(1320) along the inner side of the breakwater.

b. Morinj village lies at the head of Morinj Bay, the western extremity of Risan Bay. It has a small stone pier where small vessels can berth.

c. Perast village, on the eastern side of Risan Bay opposite Le Catene Channel, has two short quays in shallow water where small vessels can berth.

D. In Kotor Bay (the Gulf of Kotor proper)

a. Kotor, lying at the southeastern tip of Kotor Bay, is a port of call for mail steamers. The southwest side of the town is fronted by a quay about 600 yards long and 20 yards wide, with 10 ft. of water alongside the northern 300 yards. Steamers can go alongside the quay. Some lighters are available.

Supplies. Water and provisions in limited quantities may be obtained at Kotor. At Tivat water is obtainable from hydrants on the pier and the moles, and provisions can be obtained if 12 hours notice is given.

At Spilica, on the south side of Rumbor Channel, there is a coaling station for naval auxiliaries, containing about 5,000 tons of Welsh coal and some patent fuel. There is another coaling station at Rumbor with an average stock of 10,000 tons of coal.

Between Spilica and Pristan are four cylindrical oil tanks for crude oil, each of 500 metric tons capacity. The tanks, which belong to the Yugoslav Navy, are situated close to the water's edge, about 200 yards apart. There are eight to ten oil lighters.

The seaplane base at Djenovichi has several gasoline tanks, each of 80 to 100 tons capacity.

At Lipsi, north of Morinj, there are four privately-owned oil fuel tanks of 2,000 tons capacity each. They are situated on concrete emplacements sunk about 4 ft. into the ground on the foreshore. Pipes lead off from the tanks on to a stone jetty which has a depth of 16 ft. of water alongside. Small oil lighters fill up from the jetty.

Repairs. The naval dockyard at Tivat is efficient and capable of every kind of naval repair work, assisted by the occasional importation of spare parts. It normally employs 800 men, and could be considerably expanded. Castings up to 10 tons can be made in the foundry. The yard's two floating docks are of modern German make.

No. 1 Dock has a lifting capacity of 1,700 tons and can accommodate a ship of 230 ft. length, 52 ft. beam and 14 ft. draught. There is one travelling crane on the dock side with a working load of 2½ tons. The dock is in two parts.

No. 2 Dock has a lifting capacity of 7,000 tons and can accommodate a ship of 410 ft. length and of 26 ft. draught. The breadth of entrance is not known definitely, but it is believed to be considerable. There are two travelling cranes, one on each side of the dock, with working loads of 5 tons.

(1320)

The workshops of the naval air station at Djenovichi are capable of dealing with all repairs to planes. The station has four slipways, one hand winch for heavy seaplanes, and floating sheers for salvage.

Communications

a. Signal communications. A cable runs from Igalo, near Hercegnovi to Nabel, Tunis, which has a cable to Marseilles. There is also a system of local telegraph cables. There is a high power naval W/T station at Klinci about one mile southeast of Port Rose. It is connected to the headquarters command at Hercegnovi by one telegraph and two telephone lines via Kumbor, and also with Port Rose. The naval air station has its own small W/T set. There is believed to be a State-owned W/T station at Kotor, and a small civil W/T station at Hercegrovi.

There are telegraph offices at Tivat, Hercegnovi, Kotor, Port Rose, and at most of the other villages in the gulf. Besides these there are believed to be exchanges connecting the defences with the naval and military headquarters. The larger towns, such as Kotor and Hercegnovi, have telephone facilities.

A signal station, connected to the telegraph system, is located on the summit of Oshtri Point, and there are W/S stations on each side of the estuary and at Tivat.

b. Air. In addition to the repair and servicing facilities mentioned above, the equipment of the naval air station at Djenovichi includes a meteorological station, a wind indicator, searchlights for night flying, numerous wooden pontoons for the use of boats and seaplanes, and five hangars with a total capacity of about 24 planes.

c. Rail. Aside from the navy yard system at Tivat, the only railway connection is the narrow-gauge, single-track line from Zelinka via Hercegnovi to Dubrovnik.

d. Roads. Kotor is the southern terminus of the main coastal route from Sushak. From Kotor a road runs to Tivat. The main artery of traffic in the Gulf of Kotor region is this motor road, which follows the shore-line from the Oshtri peninsula clear around to the Lushtica peninsula, connecting the towns of Hercegnovi, Risan, Kotor, and Tivat.

From Kotor a mountain road, in good condition but dangerous for inexperienced drivers, runs 30 miles to Cetinje. A well-made branch of this road leads south through Budva to Spizza. A second branch of the Kotor-Cetinje road, believed to be in poor condition, runs to Tivat. Kotor is thus a road junction of some importance, with connections with all the more important towns on the Gulf, with Cetinje, and with the major towns of the northern Adriatic littoral.

6. METKOVICH

(1320) General. Metkovich village exports some lumber, but its facilities are extremely limited. It is difficult of access, as it lies about 11 miles up the Neretva (Narenta) river, which has narrows, numerous shoals, some of which

are not marked, and a changing channel over the entrance bar. The Neretva is limited by embankments which extend several hundred yards from the shore in the form of moles. In order to avoid damage to these embankments vessels proceeding up the river must not exceed a speed of seven knot The stream is so narrow in places that numerous regulations regarding passing, whistling, etc., are necessary. 376/

Chart. B.A. 1582 (Entrance to Neretva River).

Location. The entrance to the Neretva is at 43° 01'N., 17° 27' E. Metkovich lies on the left bank, 11 miles upstream, at about 43° 01' N., 17° 42' E.

Depth. The river depths are variable. There is a depth signal board at Metkovich, and another at the river's mouth, which show the depths in meters over the entrance bar and over the three principal shoals between that point and Metkovich. These signals are changed three times daily.

Anchorage. Anchorage is forbidden at the mouth, in the bends, or in the narrow portions of the river. Normally anchorage is permitted only in the positions designate as anchorage stations at Fort Opus (about 6 miles from the river mouth) and at Metkovich. Vessels waiting to enter the river sometimes anchor in an inlet about 800 yards northwest of Ossin Inlet, in 10 to 14 fathoms (18.3 to 25.6 m.) mud, good holding ground.

Pilotage. A pilot can be obtained at the river mouth. In 1938 steam vessels, the draft and length of which did not exceed 12 and 230 feet, respectively, were permitted to enter the river without a pilot.

Quayage. The quays at Metkovich village have 10 to 12 ft. (3.0 to 3.7 m.) alongside.

Port Facilities. No information is available regarding cranage, harbor craft, repair facilities, warehouses or supplies, and it is believed that Metkovich has few, if any, of these facilities.

Communications. The village is a port of call for mail steamers and has a telegraph station. There is narrow-gauge railroad connection with the Bosnian hinterland (southeast from Gabela toward Dubrovnik, northeast from Gabela via Mostar to Sarajevo).

Metkovich is on the main coastal road from Kotor to Sushak, and is also connected by road with Belgrade via Mostar and Sarajevo.

7. SELCE

General. Selce, a village with about 500 inhabitants, has no provision for dealing with shipping other than small craft, such as fishing vessels. It is mentioned here only because it was a minor Yugoslav naval base, with a barracks capable of accommodating 150 naval conscripts under training.

(1320) Chart. B.A. 2711

Location. One and one half miles southeast of Crikvenica, approximately 45° 08' N., 14° 42' E.

Depths and Anchorages. Small coastal steamers can get in to the northernmost pier, at the end of which are depths of 3 fathoms. Medium-sized vessels anchor further west, in depths of 6½ fathoms (11.9 m.). The bora blows violently in the anchorage area, particularly in winter. The holding ground seems to be good, but there is a difference of opinion on this matter among Yugoslav naval officers.

Pilotage. No data. Presumably there are no pilots at so small a port.

Quayage. There are two stone piers, both well built, running out from the shore in a westerly direction. The northernmost pier, as mentioned above, is used by the coastal steamers. The other pier has only a few feet of water at the end, and can be used only by very small craft.

The naval base, at the head of Slana Bay on the southern side of the town, has a small concrete pier which can only accommodate vessels of a few hundred tons. 377

There is a private concrete landing place in front of the Coast Defense Headquarters, on the same point.

There are no dry or floating docks, and no lifting appliances of any sort.

Harbor Craft. There are two lighters and a naval tug. The naval station has pulling boats and a small gunboat used for training conscripts.

Supplies. Provisions have to be obtained from Crikvenica, as Selce has no industries and practically no ships. The local water is fit to drink, but has a disagreeable flavor.

Repairs. There are no repair facilities.

Communications. Selce has a telegraph office. The nearest railroad station is at Place, about 10 miles up the coast towards Sushak. There is a good coastal steamer service (three times daily at varying times), from Sushak down the coast to Split, calling at all towns en route. Some of these steamers go as far as Kotor. Selce is on the main coast road from Sushak to Kotor.

8. SENJ (SEGNO)

General. Senj is a small timber and tobacco exporting town, lying along the shores of Port Senj and on the slopes of the ridge to the southward of the port.

Chart. B.A. 1561.

Location. 44° 59' N., 14° 54' E. Port Senj is located at the mouth of a river which flows through a deep gorge in the mountain range immediately back of the port.

Depths. The central depth in the entrance (which is approximately 300 yds. wide) is about 7 fathoms (12.8 m.). This decreases to 1 fathom (1.8 m) in the southern part of the port.

Anchorages. The port is formed by two moles, Maria Art, projecting northward from the southwestern point of the port, and St. Ambros (Sveti Ambrosij), projecting southwestward from the northern point.

The port is protected against southerly winds but is exposed to those from the north. During a bora (which is sudden and violent here) large vessels sometimes anchor outside the port, close to the shore between Maria Art Mole and the chapel southward of it, securing with a shorefast. This anchorage is exposed to all winds other than the bora, and is not entirely safe even from that. Vessels forced by the violence of the bora to leave this anchorage should anchor close under the southwestern shore of Veglia Island, or in Port St. Pietro of Arbe Island. (Rab Island).

There is a mooring buoy off the head of Sveti Nikola Mole, which projects from the central port of the town of Senj.

Pilotage. No data.

Quayage. Inside the port are two moles and a wooden pier. Small vessels only can berth at the moles. No information on cranage is available.

Harbor Craft. No data.

Supplies. Water and provisions are obtainable.

Repairs. No data. Presumably there are no repair facilities in a port as small as this.

Communications. Senj has a telegraph station, and is a port of call for local steamers. It is connected by a fairly good road with the near-by town of Josipdol, on the Zagreb-Split standard-gauge railway line. Senj is on the main coastal road from Susak to Kotor.

9. SHIBENIK (SEBENICO)

General. Shibenik, one of the lesser Yugoslav seaports, is engaged mainly in the shipment of calcium, coal from Dalmatia and timber from Bosnia. Shibenik is almost impregnable from the sea and provides a safe harbor for the Yugosla Navy, although the narrows, through which all ships must enter, can be very dangerous in rough weather. The Yugoslav Navy maintained a naval Signal School and Training Establishments, a school for petty officers, and an M.T.B. base at Shibenik harbor. There was an underground ammunition and mining depot on the southern shore of the Sveti Antun Channel (San Antonio), situated on the point 400 yards east of Senisna Point.

(1320) Chart. B.A. 1581 (Port Sebenico).

Location. 43°44' N., 15°53' E. The town of Shibenik lie on the eastern shore of Port Shibenik basin, facing Sveti Antun Channel.

Depths. Vessels of the largest draft can enter. Sveti Antun Channel, about 1½ miles long, the entrance channel to Port Shibenik, has depths of 10 to 24 fathoms (18.3 to 43.9m. Deep draft vessels must avoid the 3 and 4 fathom (5.5 m. and 7.3 m.) shoals near the entrance.

Anchorage. Vessels anchor off the town close enough to the eastern shore to be able to secure with a shorefast in case the bora begins to blow. The bottom is generally soft mud, not very reliable, so that vessels should moor to a buoy if possible. There are a number of mooring buoys in front of the town and in the southeastern part of the port, but most of them are so close to the shore that there is not sufficient room for large vessels to swing.

Anchorage in good holding ground is also available in the southeastern end of Port Shibenik, San Pietro Bay. This is well sheltered against the sirocco, but it is advisable to secure with shorefast because the bora blows as strongly in this bay as it does in the other parts of the port.

Small vessels usually moor to the quays near Shibenik or in Fornasa Cove.

Pilotage. Pilotage is not compulsory, but is advisable for vessels without local knowledge. There is usually a pilot at the southeastern entrance to the channel, and a berthing pilot inside the port. The use of a tug is recommended upon entering and leaving the channel.

Quayage. The port consists of the mole and quay fronting the town, known as the Town Quay, the Railway Quay where coal is loaded, the Timber Yard, of the Steinbeiss firm on Klobushac Point, and the Italian Calcium Carbide Works (defunct at last report, July, 1940) in Stanica Bay, as follows:

The stone quay fronting Shibenik extends from the north-western end of the town to a point beyond the railway station. Projecting from the southern part of this quay ther is a stone jetty, 260 ft. long on the north-west side and standing 5 ft. above water level. This forms the north-western end of the Railway Quay.

The quay northward of this jetty is about 3,000 ft. long, from 96 to 129 ft. wide, and stands about 1½ ft. over water level. There is reported to be a depth of over 5 fathoms about 5 ft. out from the quay wall.

The Railway or Coal Quay extends southward from the jetty for about 2,300 ft. but only the northern part, about 1,000 ft. long, can be used on account of the shoal at the south-eastern end. The quay stands 6½ ft. above water level. It has double sidings, and is used for loading the Dalmatian coal which is brought down by rail from the mines at Siverich.

The Steinbeiss Wharf is a wooden quay 819 ft. long. It also has railway sidings and is used for loading timber from Bosnia.

(1320) The Calcium Carbide Factory's quay in Stnica Bay to the north of the town is of wood, 327 ft. long, and stands 9 ft. 10 in. above the water level.

The low water depth at the berths of most of these wharves is around 6 meters. Both the stone pier and the wharves are suitable for a landing force. There are no lifting appliances at the stone quay or wharves, but there are a wooden derrick and travelling crane, both in a very dilapidated condition, at the Carbide Factory. There is also a floating hulk with sheerlegs, lifting capacity 6 tons, belonging to the naval base, and a small derrick, lifting capacity three-quarters of a ton, situated at the Fish Market.

There is about 15,000 sq. m. of privately-owned warehouse space at the various wharves.

Harbor Craft. There are about three cargo lighters of 650 tons capacity each, and an unknown number of tugs and oil barges and lighters.

Supplies. Provisions are procurable. Normally there are limited amounts of engineers' and unlimited quantities of deck supplies. Water can be obtained from hydrants on the quay. There is a coaling station on the south-west side of the Mandalina Isthmus, and adjacent to it an oiling station with 5 tanks. Oil is also stored in barges and lighters.

Repairs. Minor engine and hull repairs can be made.

Communications.

a. Signal. Shibenik has telegraph and telephone facilities and a naval radio station.

b. Air. Planes can land at Trulukve (43°42' N. 15°55' E.) where there is an aerodrome and a landing ground 1,350 x 1,350. There is a naval seaplane station at Vodice (43°45'25" N., 15°47'05" E.) which has two new seaplane hangars capable of accommodating 15 bombers each, and concrete slipways extending about 135 ft. in front of the hangars. In the Sveti Antun Channel, 400 yards southeast of Senisna Point, are three sheds and slipways believed to be for the use of seaplanes.

c. Railroads. There is normal gauge, single-track railroad connection with Split, and with Zagreb and the main system via Knin.

d. Roads. Shibenik is on the main coastal road from Sushak to Kotor, via Knin, but in Shibenik itself there are only two roads used by vehicular traffic, one along the sea front and one behind the town. There are about 100 motor vehicles in the vicinity.

10. SPLIT (SPLJET, SPALATO).

General. Split was the most important commercial port in pre-War Yugoslavia, since almost half of the country's foreign trade passed through this port. The Yugoslav Governme made strenuous efforts to foster Split at the expense of Fiume and Sushak. It planned to use the present port of Split for the coastal trade, and was rapidly developing a larger port in the Kashtelanski Canal at Vranjica and Port Poljud. Split's export trade was considerably larger than its import
(1320) trade. The town was an important center for the manufacture of cement. The city lies on the north and northeast sides of Port Split inlet.

Chart. B. A. 1612.

Location. 43° 30' N., 16° 26' E.

Depths. There is a depth of about 9 fathoms (16.5 m.) at the entrance, and of about 5 3/4 fathoms (10.5 m.) in the central part of the port. The depth decreases gradually toward the northern and western sides to 3 fathoms (5. m.) about 300 yards from the central part of the bay. Within the 3 fathom (5.5 m.) curve the bay shoals rapidly.

Anchorage. In the North Harbor there is plenty of good anchorage in 18 to 66 ft.

Pilotage. Pilotage is advisable but not compulsory. Pilots board the vessels about half a mile from the entrance to the port.

Quayage. Quays with more than 14 ft. of water alongside are as follows:

QUAYS	LENGTH IN FEET	DEPTH ALONGSIDE, AT M.L.W.S.
LUKOBRAN (BREAKWATER)	725) 354)	18-28 ft. according to position.
GAT SVETI DUJAM (ST. DUJAM WHARF)	426) 173)	18-24 ft. " " "
GAT MAJOR STOJAN	518) 518) 89)	15-24 ft. " "
FRONTAGE WILSONOVA OBALA	459) 490)	12-18 ft. " "

In addition to these major quays, there is a total of about 4,300 feet of quayage along the northern part of the port, used only by fishing, fruit and coasting vessels, and with less than 14 ft. of water alongside.

There are considerable facilities for embarking and disembarking troops at the various jetties and wharves. The quay walls are about 6½ ft. above normal water level. They are built of stone and concrete; for about 12 ft. from the edge they are paved with stones, the rest of the surface being macadamized. A railway line is laid along the quays from the station, north of Gat Sveti Dujam, as far as the post office at the end of Mletachki Gat. There is also a line on Gat Major Stojan.

The Municipality of Split has storage space of 450 cu. m. volume and 1722 sq. m. area on the Wilson Wharf, and there is privately-owned storage of 1280 (?) cu. m. volume and 320 sq. m. area on the Gat Sv. Dujam.

Cranage

LOCATION	NO. AND TYPE OF CRANES	TRAVELLING RANGE	LIFTING CAPACITY	HEIGHT
In the Town Harbor of Split				
On the Lukobran	2 electric	207 yds.	2 tons	49ft. abv. quay
" " "	1 "	" "	5 "	" " "
On the Gat Sv. Dujam	1 "	98 "	2 "	52 " " "
In the North Harbor of Split				
Cement factory Dalmatia at Kastel Suchurac	3 "	--	1½ "	39 " " "
	1 "	--	5 "	52 " " "
Cement factory Jadransko Anonimno Drushtvo Cement Portland at Sv. Kajo	2 "	-	4½ "	52 " " "
Warehouses of the cement factory				
Split Majdan, at Vranjica	2 "	-	1½ "	42 " " "
Split Majdan, at Vranjica	1 "	-	1 "	33 " " "
Shipyard Jadranska Brodogradilshta a.d., Split	1 floating	-	60 "	107 " " water level

Harbor Craft. There are two small harbor tugs, both under 100 tons, one naval tug, one naval water lighter capable of transporting 200 tons, and three good lighters with a maximum carrying capacity of 30 tons each.

A considerable number of ferry boats, with an average carrying capacity of 500 and a maximum speed of about 15 knots, run from Split to the neighboring islands.

Between 20 and 30 coastal sailing vessels of about 40 tons are normally at Split. These are fitted with auxiliary gasoline engines, and could be used as lighters or ferry boats.

Supplies. Deck and some engine-room supplies and ample provisions are available. Water is plentiful and may be obtained from barges or from hydrants on one of the quays. Chlorination of drinking water is advisable.

Coal can be obtained in the Town Harbor (capacity 10,000 tons, average stocks held, 7,000 tons), and in the North Harbor, in the cement factories at Kastel Suchurac and Sv. Kajo (capacity 100,000 tons, average stocks held 25,000 tons).

Oil. At Solin there are two fuel oil tanks of 5,500 tons capacity each. There are two supply mains, one next to the railway and another for ships, carried by pipe line.

Repairs. Repair facilities are good. The shipyard Jadranska Brodogradilishta a.d., Split (Adriatic Shipyards, Ltd.), has various engineering shops, platers' yards, moulding loft, foundry, air compressor house, oxygen manufacturing and galvanizing plant, which are fully equipped with modern appliances to deal with any repair work up to the limits of the floating docks. The yard normally employs about 1,000 workmen, and the workmanship in all sections of ship and engine repairing is of excellent quality. The yard can build small merchant ships and destroyers for the Yugoslav Navy. There are two building slips, one of which is 450 ft. long.

There are two steel floating docks. One, built in Germany, has a lifting capacity of 3,500 tons, and can accommodate a ship of 378 feet in length, 75 feet beam and 18 feet draught. It has one 1-ton crane. The other floating dock, built in Italy, has a lifting capacity of 2,000 tons and can accommodate a ship 198 feet in length, 43 feet beam and 13 feet draught. There are no lifting appliances on this dock.

There are four slipways as follows:

LENGTH	LIFTING POWER
182 feet	500 tons
162 feet	250 "
122 feet	150 "
96 feet	100 "

In 1938 the company was building a large permanent dock of some 15 to 20,000 tons at Vranjica in the harbor north of Split. It is not known whether this dock has been completed.

Communications

a. Signal. There is a telephone and telegraph office in the town. A small W/T station is situated near the summit of Marjan Park. The Italian cable from Trieste traverses the Kashtelanski Canal (Canale Castelli) and is landed at the cable house 175 yards west of Sveti Stjepan (St. Stefano) Point. There is a cable from Split to the island of Vis.

b. Air. In peacetime there is semiweekly air service to Trieste and Fiume from a field about 15⅝ miles inland. The headquarters of the Yugoslav naval Air Service was located at Divulje (43°31' N., 16°18' E.) about 16½ miles by road or 6½ miles by sea from Split. The Divulje station had excellent accommodation and repair facilities, including four hangars capable of accommodating 50 large machines, a cement slipway with

(1320)

a frontage some 200-300 yards long, machine shops and two large workshops. The harbor of Split proper is not considered suitable for landing or taking off, and there is no sandy shore suitable for beaching seaplanes, but there is a small landing stage for amphibian planes with slip opposite the Trumbicheva Obala in the town harbor. There are no repair facilities for planes and little aviation gas and oil at Split.

c. Railroads. There is a normal-gauge, single-track railroad to Zagreb, with a branch to Shibenik, and a narrow-gauge line to Sinj.

d. Roads. Split is on the main coastal road from Sushak to Kotor. There is good road connection via Sinj with Drnish and Knin to the north-west and over the mountains to Sarajevo to the east. These roads are generally in a good state of repair, the coast roads to Almissa and Trogir in particular being excellent, but all of them are very hilly. There is motor-bus service through the country.

11. SUSHAK.

General. Sushak has been annexed by Italy (April,1941) and re-named Borgonovo. Geographically speaking, Sushak is merely the eastern part of the port and city of Fiume. Sushak's quays and port equipment are all located in this part of the town, which consists of the basin and its quays and the triangular area bounded by the Fiumara Canal and the Rechina River.

Chart. H.O. 4072.

Location. 45°19' N., 14°27' E.

Depths. 25 meters at entrance, 32-45 meters in approach channels. The entrance to the port is 59 meters wide. The tidal rise is springs, one foot; neaps, one-half foot.

Anchorage. During fair weather satisfactory anchorage is available off Ammiraglio Cagni Mole (Fiume) in about 25 fathoms (45.7 m.) of water, mud bottom. During the stormy season vessels should moor to a buoy instead of anchoring. Anchorage is prohibited at the entrance to the port of Sushak in a rectangular area about 450 yards in width (measured to the westward of the entrance) by 750 yards in length.

Pilotage is free, and compulsory for merchant vessels.

Quayage. There is a total quayage of about 4,200 feet, with depths of 23 to 33 feet alongside. Vessels load and unload directly at the quays, so that lighterage is unnecessary. The quays are well constructed, paved,

(1320)

and equipped with appliances for handling cargo. There are eleven electric cranes, three of 3 tons and eight of 1½ tons capacity, which can be moved on rails the whole length of the quay. There are several sheds on the eastern and northern quays.

The nine wharves are as follows:

NAME	LENGTH OF BERTHING SPACE	LOW WATER DEPTHS AT BERTHS
1. Karadjordjevo pristanishte (wharf)	150 meters	7 - 8 meters
2. Aleksandrovo pristanishte	150 meters	7 - 8 meters
3. Barcic Gat (north)	115 meters	7 - 8 meters
4. Barcic Gat (south)	115 meters	7 - 8 meters
5. Obala Frana Supila	120 meters	7 - 8 meters
6. Mrtvi Kanal	Small boats	3.5 - 4 meters
7. Brajdica Betonska Obala	150 meters	8 meters
8. Kameni Gat Brajdica	Small boats (80 meters)	4 meters
9. Betonski Gat Brajdica	Small boats (50 meters)	4 meters

Karadjordjevo wharf is used for passenger traffic and for all goods going to the public and customs - free warehouses situated on this wharf. Minerals are unloaded at Aleksandrovo wharf and Barcic Gat (north and south) because there are electric cranes (7 on Aleksandrovo wharf and 4 on the Barcic Gat (north)) and railway lines on these wharves.

Prior to the present war, Yugoslavia leased additional port facilities in Fiume.

Harbor craft. There are two motor boats and one steam - boat, about the size of a British naval picket boat, and three coaling lighters.

Supplies. Fresh provisions and deck and engineers' stores are obtainable. A large supply of bunker coal is available, and stock of 10,000 tons being usually maintained. There are no oil fuel or gasoline tanks, but three tanks on the wharf supply storage for some 2,000 tons of creosote, which is used for timber preservation.

Repairs. All repairs can be performed. There are two machine and two hardware shops in Sushak, and there is a dry-dock at Kraljevica, 6 nautical miles away. The adjacent town of Fiume has a dry dock, a 40-ton floating crane, important shipyards, and elaborate machine shops.

Communications.

a. Signal. Sushak has telephone and telegraph facilities. There is a radio station in the adjoining city of Fiume.

(1320)

b. Air. A civil air company operates a regular service between Sushak and Zagreb in the summer months. Grobnik aerodrome is located about seven miles from Sushak,

on the Sushak-Zagreb road.

c. Railroads. A normal-gauge, single-track line runs to Zagreb, and there is also rail connection with Fiume.

d. Roads. Many roads in the town are metalled and others are in process of being metalled. The only roads out of Sushak suitable for motor traffic are to Zagreb and the coast road to Kotor.

Appendix C

ITEMS OF EQUIPMENT AND SUPPLY REQUIRING CONSIDERABLE SHIPPING SPACE, PRODUCED IN YUGOSLAVIA

1. Manufacturing facilities.

(a) Fabrication of motor parts. In 1934/35 at least six firms were reported manufacturing motors and motor parts, while an additional six manufactured electrical motors and equipment. The output of these factories was so small that Yugoslavia had to import the bulk of its requirements. In 1934/35 Yugoslavia had at least 69 small foundries--some of which produced small machinery and motor parts. The principal kinds of machinery imported in 1939 included hydraulic motors and water turbines; motor hammers, lifts, and compressors, agricultural equipment; machinery for textile, cement, paper, ceramic and sugar factories; printing equipment; electrical equipment; steam boilers, gas generators and other heating apparatus; and locomotives and railway equipment. 378/

(b) Baking. This is one of the more active branches of Yugoslavia's fairly well developed food industry. In 1934/35 there were at least 50 modern bakeries; but bakery equipment, except for smaller clay and iron stoves, was not manufactured in the country to any appreciable extent. Army camps were generally provided with large modern bakeries, although in some instances, small local bakeries supplied the army with bread.

(c) Shoe repair. In 1934/35 there were 31 shoe factories and every city had at least one shoe repair shop. Except in a few cases, information is lacking regarding the equipment and output of these establishments. In 1931, the eight largest factories produced 1,644,000 pairs of shoes. Some equipment for shoe repairing is probably manufactured in Yugoslavia, although it does not meet the domestic demand. In 1939 Yugoslavia imported about $34,000 worth of machinery for the leather industry and about the same amount of machinery for the shoe industry.

(d) Mechanical repair. Although there were at least 17 manufacturers of tools for industries and crafts, most tools still had to be imported into pre-war Yugoslavia. A partial means of meeting this deficiency might be found in the output of small blacksmith shops.

(e) Impregnation equipment. In 1934/35 Yugoslavia had seven firms manufacturing impregnated telegraph poles, and at least eight firms producing impregnated linen.

(f) Saw mills. In 1934/35 there were over 1,300 saw mills in Yugoslavia. Ten metal works manufactured circular and band saws, and primitive steel saws were produced in small shops all over the country. Virtually all other metal saw mill machinery had to be imported.

2. Construction equipment.

(a) Power shovels. Some are to be found in the possession of the larger mining enterprises, but probably none of these shovels has been built in Yugoslavia.

(b) Graders. Some are available, but these are all probably of foreign manufacture.

(c) Tractors. Some are available, but, again, these are probably of foreign manufacture. In 1939 Yugoslavia imported about 852 tons ($270,000 worth) of tractors, as compared with 668 tons ($130,000 worth) of Diesel engines, steam engines, and street graders.

(d) Dump trucks and wagons. Only the latter have been manufactured in Yugoslavia. Tip cars can be manufactured, however, and a considerable number of foreign-made cars can probably be found in mining regions, since Yugoslavia imported 949 tip cars in 1939.

3. Transportation facilities.

(a) Harbor equipment, lighters, and other shipping facilities.

(1) Dollies. These are available at the seaports of Sushak, Split and Shibenik on standard gauge track, and at Dubrovnik, Gruzh and Tivat (on Kotor bay) on narrow gauge track The major river ports all have standard guage models.

The total number of small Yugoslav tender locomotives usable as dollies was 587 in 1938, of which 469 were standard gauge, 102 were 2 ft 6 inch gauge and 16 were 1 foot 11 5/8 inch gauge. 379/ The number located at the various ports is not known.

Yugoslavia had 2 factories equipped to produce dollies, Slavonski Brod and Smederovo. Slavonski Brod did not produce more than 50 light locomotives a year. 380/

There are 8 large railway workshops at Maribor, Subotica, Nish, Zagreb, Smederovo, Petrovgrad (V. Bechkerek), Kraljevo and Belgrade, which may be able to produce small locomotives.

(2) Cranes. Yugoslavia's coastal ports had at least 28 cranes with a total lifting power of over 289 tons in 1940. They were distributed as follows: 381/

Locations	No. of Cranes	Type of Crane	Lifting capacity per crane in tons.	Height of train
Split	2	electric	2	49 ft. above quay
	1	"	5	" " " "
	1	"	2	52 " " "
	3	"	1½	39 " " "
	1	"	5	52 " " "
	2	"	4½	52 " " "
	2	"	1½	42 " " "
	1	"	1	33 " " "
	1	floating	60	107 " " "
(1320) Sushak	3	electric, mobile	3	no data
	8	" "	1½	

Locations	No. of Cranes	Type of Crane	Lifting capacity per crane in tons.	Height of train
Kotor (Djenovichi)	1	floating crane (sheer-legs type)	no data	no data
	1	steam, mobile	" "	" "
	1	hand winch	" "	" "
Kotor (Tivat)	2	floating cranes	ca 15 or 45	" "
	2	mobile	5	" "
	1	mobile	2½	" "
Shibenik	1	mobile	no data	" "
	1	wood derrick	" "	" "
	1	floating crane (sheer-legs type)	7	" "
	1	small derrick	3/4	" "
Dubrovnik II	2	electric, mobile (old)	2½	" "

In pre-war Yugoslavia river port cranes were located primarily at Belgrade. At the Belgrade Sava port there was a floating crane, and 5 metal cranes or winches. At the Danube port there was a floating crane. Other cranes were at Sisak, and Slavonski Brod. 382/

There are probably at least 2 motorized cranes at each of the larger Danube, Sava, and Drava ports, in addition to hand winches. The equipment for the most part has been imported. In addition, there are factories located in port areas which should have their own loading equipment.

(3a) Small motor boats and coastal trading and fishing boats with motors. Adriatic ports with shipbuilding facilities for motor scooters and other small craft are Split, Sushak, Bakar, and the Tivat dockyard in Kotor bay. Construction figures are not available. Before the war at least 26 small private enterprises produced motor boats. 383/ Small motor boats operating on the Adriatic coast in 1938 totalled 5,549 (14,767 gross tons). Of these 292 (989 gross tons) were motorized fishing boats.

Construction of motor boats for river traffic is for the most part confined to small shops with an annual capacity of 10-25 boats. There used to be 7 such companies at Belgrade and 1 each at Panchevo, Apatin and Vukovar. The large ship and railroad plant, "Sartid", at Smederevo constructed all types.

In 1938 the Danube river ports had 305 small motor boats with a total horsepower of 5,878. For distribution by ports in 1936 see Appendix on "Principal River Ports".

(4) Lighters. These can be built at the main Adriatic ports, and at Smederevo and Belgrade on the Danube. A few have been built by private companies elsewhere.

Lighters at Adriatic ports in 1939-40 were distributed as follows: 384/

Locality	No. of Lighters	Capacity of each lighter in tons.
Dubrovnik (Gruzh)	2	20
Kotor Bay	10	--
" "	2	--
Selce	2	--
Shibenik	3	650
"	about 10	15-50
Split	1	200
"	3	30
Sushak	3	no data

(5) Barges. Wooden barges can be produced in Yugoslavia, but metal barges and tankers have been largely imported. The only barges listed on the Adriatic coast are small tankers or lighters at the ports of Shibenik and Tivat, and some of the smaller ports which have oil storage facilities. There is also a considerable number of river barges, many of which were constructed in Yugoslavia. 385/

Motor barges for river traffic can be constructed at Belgrade and Smederevo, but most have been imported. In 1938 there were 22 motorized barges, 577 non-motorized barges of iron and 358 non-motorized barges of wood on Yugoslav rivers. 386/

(6) Tugs. Few if any are built in Yugoslavia. Sea going tugs in 1939-40 were distributed as follows: 387/

Dubrovnik	1
Hercegnovi	1
Selce	1
Shibenik	3-5
Split	3
Sushak	5-8

There were probably many others. There were 114 river tugs in 1938. 388/ For their distribution see Appendix on "Principal River Ports".

(7) Shipways with chains and other lifting equipment. Split harbor had the following slipways in 1939/40: 389/

Number	Length	Lifting power
1	182 ft.	550 tons
1	162 ft.	280 tons
1	122 ft.	170 tons
1	96 ft.	110 tons.

Other slipways are probably located at Sushak, at Belgrade and at some of the larger river ports. Mechanical and motor parts of steel have to be imported.

(8) Floating dry docks. The Adriatic coast has 6 drydocks distributed as follows:

	Lifting capacity in tons	Dimensions
Tivat (Kotor Bay)	1,700	230 x 52 x 14 feet
" " "	7,000	410 x ? x 26 feet
Split	3,500	378 x 75 x 18 feet
"	2,000	198 x 43 x 12 feet.
Bakar can construct small vessels	about 1,500	no data
Sushak (Kraljevica)	no data	no data

They were probably built in Germany or Belgium. 390/

(9) Mooring buoys. Harbors known to have metal mooring buoys are the following:

Bakar	5
Port Rose (Kotor)	2
Shibenik	5-10
Sushak	5-10
Senj	1

Yugoslav metal works are equipped to produce buoys. 391/

(b) Railway equipment. The Yugoslav state owned eight large locomotive and railway car shops at Nish, Zagreb, Maribor (with a section at Ptuj), Petrovgrad, Subotica, Smederevo, Sarajevo, and Kraljevo. There were also two independent shops -- at Veles and Ljubich. Although a considerable number of cars could be produced in Yugoslavia, a few were steadily imported. The last available official statistics (those of 1938) furnish the following information regarding rolling stock on the Yugoslav state railways:

Gauge	Rolling-Stock	No. of Units	No. of Axles
Standard	Locomotives	1,603	
	Passenger cars	4,143	9,481
	Freight cars	42,062	84,503
2 ft. 6 in.	Locomotives	551	
	Passenger cars	909	3,019
	Freight cars	10,704	36,966
1 ft. 11 5/8 inches	Locomotives	155	
	Passenger cars	78	312
	Freight cars	936	3,744

In that same year it was reported that the private railways had 94 locomotives, 210 passenger cars, and 974 cars. These were all narrow gauge.

The workshop facilities in 1941 were hardly adequate for locomotives and rolling stock awaiting repairs. Virtuall all new locomotives were imported. 392/

(c) Highway transportation. In 1940 automotive vehicle were distributed as follows: 393/

Passenger (gasoline cars)		15,886
Busses (gasoline)		404
Busses (diesel)		564
Trucks (gasoline)	Total	1,462
Trucks (diesel)	22,185	3,869

(1320)

The vast majority of the above cars were of foreign manufacture. In 1939, for example, Yugoslavia imported 1,151 trucks and 3,756 automobiles. Yet there were significant attempts, just before Yugoslavia's entrance into the present war, to develop a domestic automotive industry. Late in 1940 the Rakovica automobile factory (near Belgrade) was opened for the production of light cars of Czech design (Praga model). The bodies were constructed by the "Jasenica" Company at Smederovo Palanka. 394/

4. Miscellaneous supplies and equipment.

(a) Food supplies. Yugoslavia is a food producing country. On January 1, 1940 it had 906 food producing plants. While smaller food machinery was manufactured at home for such enterprises, the heavier machinery was imported.

(b) Gasoline and lubricants. In 1941 there were two fairly large refineries -- Caprag and Bosanski Brod -- and two small refineries -- Dravograd and Osijek. According to recent reports a small refinery has been built at Smederevo by the Germans. All heavier machinery and repair parts must be imported.

(c) Storage facilities for oil and gasoline. The total oil storage capacity of Yugoslav tanks in 1939 was 183,545 tons. The distribution of these storage facilities was as follows: 395/

(1) Owned by Socony Vacuum Oil Co.:

Location	Capacity in tons
Bosanski Brod	110,000
Ljubljana	130
Zagreb	849
Novi Sad	183
	111,162

(2) Owned by Shell Oil Co.:

Location	Capacity in tons
Caprag	47,534
Cukarica	9,000
Zagreb	118
Osijek	34
*Dubrovnik	5,370
*Solin (Split)	12,656
Sarajevo	50
	74,762

* Available for refueling navy and other ships.

(3) Owned by Yugoslav Government and reserved for National Defense forces:

Location	Capacity in tons	Location	Capacity in tons
Ljubljana	8	Brdjani	5,600
Zagreb	400	Krushevac	36
Novi Sad	360	Nish	400
Zemun	400	Mostar	240
Bela Crkva	80	Trebinje	2.4
Bela Crkva	8	Skoplje	400
Smederevo	4,000	"	96
Zabrezje	2,000	Tivat	176
Sarajevo	32	Tivat (lighters)	80
"	4	Shibenik	80
"	2	Pristan (Kotar)	1,100
"	400	Vrdnik	4,000
Kraljevo	120	Tivat	1,200
Vitanovac	5,600	Shibenik	1,200
Lopatnica	5,600	Volinja	4,000
		Total	37,708.4 tons

(4) Owned by miscellaneous small private companies:

Location	Company	Capacity in tons
Osijek	Ipoil	8,960
Dravograd	Dravograd Oil Co.	2,240
Belgrade	---	280
Petrovgrad (Vel.Bechkerek)	Astra Co.	560
Vrapca	" "	280
		12,320

Under construction at Adzhin Potok in Bosnia for the Yugoslav government were 10 reservoirs of 1,680 ton capacity each.

(d) Gasoline Drums. There is no information on drum production. Most of them were probably imported.

The supply in 1939 was 115,920 drums with a capacity of 20,852 tons. Each drum held about 6 tons. 396/

(e) Cloth. Although Yugoslavia had an important textile industry it nevertheless imported a large quantity of cloth, particularly cotton goods. Light textile machinery and repair facilities can be provided by Yugoslav industries; heavy machinery, however, has to be imported.

(f) Sandbags. No information is available. Thirteen textile firms have produced bags of one kind or another.

(g) Camouflage cloth. No information is available.

(h) Lumber and timber. Ample supplies are available, since lumber has been one of Yugoslavia's most important exports.

(1320) (i) Telegraph poles. At least 35 firms have manufactured telegraph poles, and seven firms have produced impregnated ones. Telegraph poles were among Yugoslavia's pre-war exports.

(k) Structural steel. Although there are several large iron and steel enterprises, Yugoslavia has depended upon imports for much of her structural steel. There were at least 41 firms constructing equipment for bridges, railways etc. There were 11 plants producing building materials of iron and steel.

(l) Rails. There were at least seven firms producing rails and switches. In 1939 Yugoslavia imported about 7,716 tons of rails, about 942 tons of switches and rail coupling and about 2,210 tons of other materials for railway transporation.

(m) Barbed wire. There were 16 firms producing wires of all kinds; Yugoslavia imported about 2,756 tons. Specific information regarding barbed wire is lacking, however, it can be assumed that Yugoslavia produced a considerable quantity of it because of her military needs.

(n) Laundry Equipment. Probably none has been produced except parts for minor repairs.

(o) Telephone and telegraph wire. In 1939 Yugoslavia imported 1,433 tons of conducting wire, in lead pipes and about 55 tons of insulated wire.

(p) Aircraft gasoline tanks, both self-sealing and auxiliary. Probably none has been produced. Information is lacking as to the number in existence.

Appendix D

1. Belgrade

Importance. Belgrade (Beograd) is important for its strategic location at the meeting place of important railways, roads and river transportation. It also has considerable commercial and industrial significance. Formerly the capital of Yugoslavia it is now the capital of Serbia.

Location. Latitude 44°48', longitude 20° 28'. The city has a strategically important location on a hilly promontory at the junction of the Sava and the Danube rivers, overlooking the Vojvodina plain to the north. The main railway station, on the bank of the Sava, has an altitude of 261 feet. The central part of the city is considerably higher. Mt. Avala, about 12 miles south of the city, is 1,672 feet high. 397/

Description. The city has grown rapidly since 1900. Between November 1918 and September 1933, 11, 580 new apartment houses and 3,412 large commercial and government buildings were constructed. Over 600 modern streets were built in the same period. 398/ The main artery is Kralja Aleksandra Boulevard. (See attached city plan and map). Very little of the old oriental city remains. 399/

Before the German occupation the more important buildings included the cathedral, two royal palaces, the residence of the patriarch, the Skupshtina (parliament) building, the university, and a number of large governmental buildings. 400/ Many of these were destroyed by the German Luftwaffe.

The old citadel (the Kalemegdan) on the point of the promontory at the junction of the two rivers, has been converted into a park, although part of the fortifications are used for barracks and for the Military Geographical Institute. 401/

In 1934 the limits of the city were greatly extended to take in 13 localities, including the city of Zemun (now part of Croatia) across the Sava from Belgrade. According to the 1931 census Zemun had 28,083 inhabitants. It is important for its large airport and its industries (breweries, flour mills and chemical plants). 402/ The municipality thus increase from 21,214 acres to 111,716 acres. 403/

Climate. The climate is continental, with cold winters and hot summers. In 1938 the mean January temperature was 31.6°F. and in July 72.9° F. The coldest temperature in 1938 was -3.1° F; the hottest was 98.1° F. The precipitation is abundant, with 26.7 inches in 1938. 404/

Population. Since April, 1941 there have been considerable shifts in the population. In 1931 Belgrade proper had 238,775 inhabitants, 405/ while the population of the expanded municipality, as noted above, reached 298,358 according to 1931 data. The 1941 estimate was between 380,000 and 400,000. Since the German invasion the population has probably declined, as the Germans estimate that 15,000 were killed by their air attacks, 406/ and many people are believed to have returned to their villages. On the other hand, Slovene and other refugees have been coming to Belgrade.

(1720)

The people are predominantly Serbian. In 1931, 22,254 of the 238,775 Belgrade inhabitants were of foreign birth, as follows: 407/

Albanian	81	Austrian	1,469
Greek	515	Italian	1,579
Rumanian	1,604	Czechoslovak	2,110
Hungarian	2,495	Russian	9,232
		Others	3,169

The population is largely Orthodox, although there are a number of Catholics and Yugoslav moslems. According to religious affiliation the people of Belgrade and surrounding areas were as follows in 1931: 408/

Orthodox	209,449	Other Christians	2,041
Roman Catholic	56,776	Moslem	3,821
Evangelical Protestant	7,395	Others	9,456

According to occupation and occupational dependency, the population in 1931, in Belgrade City alone, was divided as follows: 409/

	Workers & dependents	Workers only
Agriculture, forestry, fishing	3,212	1,739
Industry and trades	79,461	46,167
Commerce, finance, communications	51,163	25,677
Public service, professions, army	54,681	33,438
Other occupations	50,258	34,619

Utilities.

a) Electricity. The Belgrade power plant supplies around 28 million kw. h. in 1930. A new plant, built subsequently and possessing modern equipment, was expected to furnish between 40 to 50 million kw. h. It was to supply the sub-station near the old electric plant and another station near the restaurant "Mostar", each of these having a capacity of 9,000 kw. The new power plant was to have 18,000 kw. initial capacity, as compared to 10,000 kw. of the old power plant, and a maximum capacity of 24,000 kw. 410/ In 1938 a 30-mile, high-tension cable supplied power to Smederevo. 411/

In 1937 Belgrade region had 4 public and 30 industrial power plants, with a production of 71,938 kw. h. Consumption of energy was as follows (in 1,000 kw. h.): 412/

Private lighting	10,425
Street lighting	4,773
For motor use	49,861
Loss	6,879
Total	71,938

b) Belgrade has abundant water. Sewage is taken care of by the Sava and Danube rivers. All but the poorer suburbs have sewers.

Industry. Before the war the most important industries included food products, textiles, metal products, chemicals, and construction materials. 413/ In 1934 there were 4 flour mills, a sugar refinery (annual capacity 11,000 tons in 1931), 2 breweries (annual capacities 2,642,000 and 5,284,000 gallons in 1931), and a large variety of other food products factories. The forty-odd textile and clothing factories included the large and modern Kosta Ilich textile mill, located on the bank of the Danube, which in 1927 employed 1,000 workers and had branches in Leskovac, Karlovac and Veliki Bechkerek. 414/ The "Boston" shoe factory produced 500 pairs of shoes daily in 1931. 415/

Other important branches of industry were lumber and wood products, paper products, leather goods, and construction materials, including brick and glass. A large variety of chemical products were produced. The Hromalu factory produced aluminum hydrate, oxide and sulphate, and borax; the Munk chemical factory in 1931 had an annual output of 1,650 tons of glue. 416/

Metal products, instruments and machinery included articles from paper clips to bridge spans and street cars.

Late in 1940 the Rakovica airplane motor works added an automobile department for the production of light cars of Czech design (Praga Model). The bodies were constructed by the "Jasenice" Company at Smederevo Palanka. 417/

In 1941 several Belgrade and Zemun concerns were producing aeronautical equipment. Airplanes were made by the Ikarus and Zmaj companies of Zemun and the Rogozharski company of Belgrade; the latter concern also produced propellers, fuel, and cooling fluid. The Hanan company of Belgrade produced landing and flotation gears, magnetos and spark plugs. The Mikron and the Teleoptik companies made instruments. The Societe Anonyne Yugoslave des Moteurs d'Avion, in Zemun, made airplane motors, and W.H. Smyth, in Belgrade, made aircraft engine parts, and accessories, instruments, landing gear, and the like. 418/

Little is known about Belgrade's industry since the conquest by the Axis. A recent report, however, states that the Germans are erecting a meat-packing plant.

Supplies. In normal times there are abundant quantities of foods available (grain, flour, meats, dairy products, fruits), as Belgrade is surrounded by farming and truck garden country, and normally exports these items as well as timber. 419/ Other products normally available are coal, building supplies, including cement, leather, soap, glass, and cotton and woolen textiles. (See list of industries above). 420/ Heavy machinery, and metal products are generally imported.

Highway connections. Belgrade is an important road center. In 1939, the International Highway to Istanbul had been completed from Subotica near the Hungarian border to Belgrade (106 miles). East of Belgrade the Highway was constructed only as far as Kragujevac. 421/ Beyond Kragujevac, the road to Nish and the Bulgarian frontier is of fair macadam. At Nish a highway goes south to Skoplje and the Greek frontier.

To the Adriatic coast the main highways include Belgrade-Tuzla-Banja Luka-Sushak (Fiume); Belgrade-Uzhice-Sarajevo-Dubrovnik; and Belgrade-Kragujevac-Mitrovica-Podgorica-Kotor. There is an important highway up the Sava valley from Belgrade to Zagreb and Ljubljana, and another up the Danube to Osijek, and from there to Maribor and Ljubljana. Still another route follows the line of the Tisza river through Novi Sad to the Hungarian frontier beyond Senta. A road to Rumania passes over the new Panchevo bridge at Belgrade via Vrshac. 422/

Local transportation

a) Street railway system. Prior to the German invasion, Belgrade, in proportion to its population and its area, was inadequately supplied with street cars. In October, 1939, it was reported that Belgrade had 26.1 miles of double-track lines, and 130 street cars and trailers. Twelve new tramways were ordered, and new car barns were planned in that year. In order to meet the needs of the city a total of 250 street cars (in addition to 30-40 busses) were needed. 423/

In 1938, the last year for which the detailed statistics are available, the Belgrade street railways showed the following results: 424/

Exploited length	26.1 miles
Number of electric cars	90
Total number of seats	5,886
Number of trailers	49
Total number of seats	2,064
Number of transported passengers	59,410,949

b) Bus systems. In 1939 the Belgrade Municipality had eight bus lines and about 20 busses. These were overburdened and in need of repair. Many lines, such as Slavia-Dedinje, and Zemun-Aerodrom, had only one bus in service. Money was appropriated in 1939 for 20 new busses and for a new modern 35,000 square foot garage--to accommodate 60 busses. 425/

Local bus lines run to Mt. Avala south of Belgrade, over the new bridge across the Danube to Panchevo (20 minutes), and to Zemun. 426/ Urban bus transportation in Belgrade was as follows in 1938: 427/

Number of lines	8
Length of lines	24.2 miles
Number of autobusses	16
Number of seats	746
Number of transported passengers	4,889,567

Most of these lines were in Belgrade and its suburbs, Zemun and Panchevo.

Interurban bus transportation serving Belgrade was as follows in 1938: 428/

Number of lines	6
Length of lines	632
Number of busses	11
Number of seats	324
Number of transported passengers	298,393

Longer bus lines run from Belgrade to Topola, (2 hours south), Kragujevac (89 miles), Valjevo and Zvornik (84 miles southwest) and to Grocka and Smederevo (35 miles east). 429/

c) Other urban transport facilities. In 1938 there were in Belgrade, 3,859 trucks, 153 trailers and 427 light truck bodies, 1,557 carts for freight, and 1,880 horse-drawn passenger vehicles. 430/ In 1939 there were 10 large automobile agencies and garages. At least one of these had an extensive machine shop. 431/

Railways. Belgrade is one of the most important railway points in southeastern Europe on the main line

to western Europe via Zagreb (266 miles) and Ljubljana (88 miles beyond Zagreb). Belgrade is also connected with Vienna via Zagreb and Maribor (106 miles from Zagreb). 432/ Another important line runs north from Belgrade to Novi Sad (48 miles) and Subotica (114 miles from Belgrade). From Subotica the line continues to Budapest, Vienna; at Subotica there are connections with Bucharest. 433/

Two lines of lesser importance run north and northeast to the Rumanian frontier, via Velika Kikinda and Vrshac respectively. To the southeast the trunk line to Istanbul continues via Nish (154 miles), and Caribrod (216 miles) to Sofia. 434/ The route to Salonika proceeds south from Nish to Skoplje (288 miles from Belgrade) and Djevdjelija (391 miles). 435/

To the southwest there is only a narrow-gauge line to Sarajevo (276 miles) and Dubrovnik on the Adriatic, 194 miles from Sarajevo. 436/

The main railroad station and the railroad yards are on the right bank of the Sava, in the southwestern part of the city. The railroad lines leave the city to the south, across a bridge over the Sava, and north along the bank of the Sava and the Danube, crossing over the large new bridge over the Danube to Panchevo (see attached maps). 437/

Air Transportation. Belgrade is provided with a large civil airport and a military airfield, both at Zemun. The civil airfield is on the left bank of the Sava, 1.9 miles south of Zemun, and 3.1 miles west of Belgrade, at 44°53' N., 20°24' E; elevation 24.3 feet. In 1939 its area was 9,514 x 3,609 feet. Hangars and repair facilities were available before the war. 438/

In 1939 summer air service was as follows:

Belgrade - Borovo - Zagreb - daily in each direction,
Belgrade - Skoplje " " " "
Belgrade - Sarajevo-Dubrovnik " " " "
Belgrade - Sarajevo - Zagreb " " " "
Belgrade - Skoplje-Bitolj-Salonika, Sundays only, in both directions.

Foreign air-lines, using Belgrade's airport were the following: 439/

Air-France: from Paris via Budapest and Belgrade to Bucharest.
Lufthansa: from Berlin to Athens via Budapest, Belgrade and Sofia; also Berlin to Bagdad via Belgrade and Athens.
L.A.R.E.S.: from Bucharest via Belgrade and Zagreb to Milan.
Ala Littoria: from Rome via Belgrade to Bucharest.

It was recently reported that there is daily service (except Sundays) from Belgrade to Sofia, and Belgrade to

Budapest. The planes are reported stationed at the Zemun Aerodrome. 440/

Water Transportation. Belgrade, located at the junction of the Danube and the Sava rivers and close to the Tisza, is an important center of river transportation. In 1938, 953,579 tons of domestic freight were discharged at Belgrade, and 72,118 tons were loaded. The port also handled 106,704 tons of foreign imports and 7,680 tons of exports. In addition, rafts with 2,681,921 cubic feet of timber were floated to Belgrade. For port facilities see Appendix on "Principal River Ports". 441/

Communications. Belgrade was the center of the Jugoslav state telegraph system. In 1939 there were 7 radio-telegraph transmitters. (For the call numbers, power and wave lengths, see page 108 in main body of survey). In 1938 they sent 89,682 radiograms and received 106,175. 442/

In 1938 Belgrade had one shortwave radio broadcasting station, and a 20 kw. station broadcasting with a wave-length of 437 m. The antennae were 328 feet from the ground. There were 23,744 receiving sets in the Belgrade postal district. 443/

Health and Sanitation. In 1938 there were 7 hospitals in the Prefecture of Belgrade, with 3,540 beds and 1,154 staff members. 47,983 patients received attention. 444/ In all there were 4,747 physicians, 353 dentists, and 1,408 pharmacists in this area. 445/

The following were the prevelant contagious diseases in the Prefecture of Belgrade in 1938: 446/

	Cases	Deaths		Cases	Deaths
Typhus	8	-	Diphtheria & Croup	542	14
Typhoid	124	8	Cerebral Meningitis	32	14
Paratyphoid	16	-	Erysipelas	377	8
Dysentery	51	3	Tetanus	7	4
Scarlatina	471	5	Anthrax	7	1

10,477 examinations for tuberculosis were made in the Prefecture of Belgrade in 1938, 447/ and in the city of Belgrade deaths from tuberculosis in 1937 numbered 601, or 19 per cent of all deaths. 448/

Belgrade has a Military Hospital of considerable size, as well as three state hospitals. The number of beds and the personnel of these hospitals in 1937 was as follows: 449/

Contageous Disease Hospital	279	beds	9	doctors	77 other personne
Hospital for insane	879	"	11	"	198 "
Belgrade Hospital	1,586	"	92	"	459 "
Total	2,744	"	112	"	734 "

There were in addition three state hospitals in the Belgrade suburbs: 450/

Zemun	6 doctors	69 other personnel
Panchevo	2 "	15 " "
Dedinje	12 "	55 " "
Total	20 "	139 " "

Municipal Government. Prior to the German occupation the Prefecture of Belgrade contained six communes, including Zemun and Panchevo. It was under the direct control of the Ministry of the Interior. At the head was a prefect, with the rank of deputy-ban. In Zemun and Panchevo the prefect exercised authority in his capacity of ban, while in Belgrade he was rated as sub-prefect (nachelnik). The prefect headed and supervised all local affairs. He had at his disposal a regiment of gendarmerie, and a squadron of mounted gendarmerie.

The Prefecture had three main departments: Department of Public Works, Department of Social Welfare and Public Sanitation, and Department of Commerce and Industry. All other functions were exercised by the responsible ministers, Belgrade being the capital city and center of national administration.

The Prefecture of Belgrade had the following police departments: administration, general police, criminal police, travelling police, and technical police.

The capital was divided into 17 quarters. There were two urban police departments, in addition to Belgrade proper, -- Zemun and Panchevo - and three special sections -- railroad police, port police, and airport police. The Minister of Interior was head of the police system.

Newspapers. The largest dailies prior to the German invasions were Politika (Politics), Pravda (Justice), Vreme (Time) and Sluzhbene Novine (Official Journal). The first three were published only in cyrillic letters. Politika had the widest circulation and was the most democratic. Vreme was Stojadinovich's (the prime minister's) official organ.

At least three papers are now published in Belgrade: Novo Vreme (New Time), Donauzeitung, and Obnova (Reconstruction).

The Serbian puppet government, located at Belgrade, is headed by the former Minister of War, General Milan Nedich, assisted by Milan Achimovich, Minister of Interior, and Dimitrije Ljotich, head of the former Yugoslav Fascist movement. Except for Nedich they were hardly known before the German invasion. The Belgrade prefect, at the present time, is Dragi Jovanovich, former head of the secret police.

TOWN PLAN OF BEOGRAD

(BEFORE 1937)

LEGEND

- RAILROAD
- RAILROAD AREA
- MAIN ROAD
- PUBLIC BUILDING
- PUBLIC GROUND
- MILITARY AREA
- INDUSTRIAL AREA

1 MILITARY GEOGRAPHIC INSTITUTE
2 BOTANIC GARDENS
3 ROYAL PALACE
4 MAIN POST OFFICE
5 MEDICAL UNIVERSITY
6 KARADJORDJEV PARK
7 TERAZIJE SQUARE
8 KRALJ PARK AND SQUARE
9 SOKOL STADIUM
10 UNIVERSITY LIBRARY
11 OBSERVATORY
12 CATHEDRAL

HOTELS

H-1 SRPSKI KRALJ
H-2 EXCELSIOR
H-3 PALACE
H-4 BRISTOL
H-5 PETROGRAD
H-6 MOSKVA
H-7 POSTA
H-8 ZANATSKI DOM

SCALE

0 50 200 400 600 800
METERS
0 50 200 400 600 800
YARDS

Reliability Code: 2B--2B--2

MAP NO. 2817
29 NOVEMBER 1943

COMPILED AND DRAWN IN THE BRANCH OF RESEARCH AND ANALYSIS, OSS
LITHOGRAPHED IN THE REPRODUCTION BRANCH, OSS

2. Banja Luka.

Importance. Banja Luka, the chief city of western Bosnia, was the capital and highway and communications hub of former Vrbas Banovina and the seat of an Orthodox Metropolitan, a Catholic bishop, and a Mohammedan Mufti. It is the center of a lumber, wheat, coal mining, and dairy region. Its location at the N entrance to the Vrbas gorge, which forms the only good highway to the interior of the Bosnian highlands from the N, has always given it strategic importance. 451/ Its position as a cultural center is indicated, to a certain degree, by the 10 primary schools, 1 high school, 1 normal school and 1 small Moslem school, which were in use in 1934. 452/

Location. Banja Luka is located at the point where the Vrbas river emerges from a narrow gorge into the Sava plain, at an elevation of 535 feet. Its coordinates are 44° 46' N; 17°10' E. 453/ To the S and SW rise the heavily wooded slopes of the Dinaric Alps.

Description. Banja Luka is built on both banks of the Vrbas river which flows through the city in a SW-NE direction. The southern part, on the foothills of the mountains, is the old city. It is characterized by narrow cobblestone streets, numerous mosques, an old stone fort on the left (W) bank, and the large state alkaline baths on the SE side. North of the old city, on level ground, is the new city with broad paved streets. The main artery, which runs N-S and crosses the river is the Kraljev Drum. The new city contains about 30 medium size commercial, administrative and school buildings. The largest of its two hotels has 100 rooms. In 1931 the city had 3,000 residential dwellings, most of which had large gardens. 454/

Climate is typically continental. Prevailing winds are NE. Annual mean temperature is about 50° F. The winters are cold and dry. 455/

Population. In 1931 there were 22,165 inhabitants, including 6,769 Orthodox Serbs, 6,486 Catholic Croatians, 8,039 Moslems, 365 Jews, 157 Protestants and 350 others. 456/

The working population in 1931 was divided as follows: 457/

Agriculture, forestry, fishing	954
Industry	3,470
Commerce and communications	1,113
Government, army, liberal professions	2,920
Others	1,262
Total	9,719

Banja Luka has always been a center of a strong Serb-Yugoslav movement, but at present the population is political disunited, with groups of Croats and Moslems supporting the Croatian fascist government.

Utilities. An 800 h.p. hydroelectric power plant on the Vrbas river is operated by the Trappist Monastery NE of Banja Luka and provides the city with electric light. There were 10 power stations in the Vrbaska banovina in 1935. 458/

Water comes from the Vrbas above Banja Luka and its smaller tributaries, and is abundant.
(1300)

Industry. There has been relatively little industrial growth up to 1941. The city had 2 ceramics factories, 1 coal mining enterprise, 1 power plant (outside the city), and 1 large steam saw-mill. Five other saw mills were located within the county. In 1931 the three steam saw mills had a daily capacity of 915 cubic yards of lumber and 3 other small water driven mills produced 52 cubic yards daily. 459/

Banja Luka had a brewery and a tobacco factory which produced 364,089 cigarettes and 2,046,000 pounds of tobacco in 1928. 460/

Supplies. With 47 per cent of the surface of Banja Luka covered with beech and oak forests, lumber supplies are most important. Corn grows in over half of the cultivated area and wheat and oats in virtually all the remaining portion. Plums, apples and walnuts are the predominant fruits. Banja Luka is the market center for the whole region and vegetables are generally available.

Livestock in the county in 1934 included 6,839 horses, 39,265 cattle, 40,815 pigs, 78,460 sheep, 10,952 goats, 142,704 fowl and 4,806 bee hives. 461/

Exports in addition to lumber and dairy products included leather, wool, fruit and nuts. The Trappist Monastery about 3 miles NE of Banja Luka, handled over 1,600 gallons of milk a day. Its best known product was, however, the famous Trappist cheese. 462/

Highway Connections. Roads in the Banja Luka area are first class, hard surface macadam, without steep gradients, but as a rule they are extremely narrow, especially south of the city. 463/

Roads converge on the town from 7 directions. The main highway through the city comes S from Bosanska Gradishka (56 mi.) and continues to Jajce (45 mi.) through the narrow and difficult Vrbas Gorge. There are many road tunnels and hairpin turns. From Jajce the road continues SE to Sarajevo (146 mi. from Banja Luka).

A relatively good second class highway runs ENE to Prnjavor (37 mi.), Derventa (58 mi.) and Belgrade, and a first class road runs SE to Kotor Varosh, (21 mi.) then E to Doboj (71 mi.) and Belgrade (271 mi.). A difficult SW road runs to Kljuch (41 mi.) and continues by a roundabout way to Knin and Shibenik on the Adriatic.

A relatively poor road goes W to Sanski Most (28 mi.) and Bihach, and a main road runs NW to Prijedor (35 mi.) and Zagreb (138 mi.).

Transportation. Automobiles and carts have been the principal means of intraurban transportation. In 1932-33 there were some 50 private cars, 10 busses, 10 trucks, 20 motorcycles and 160 bicycles in the county. 464/ The city in 1934 had 5 bus companies, 7 taxi and 14 carriage agencies, and 21 moving and trucking companies, all small. 465/ Interurban bus lines run to Jajce, Gradishka, Derventa, Teslich and Doboj. 466/

Railways. Banja Luka is the terminus of a standard gauge 80.7 mi. branch line which leaves the Zagreb-Belgrade

trunk line at Sunja, SE of Sisak, runs south to Kostajnica on the Sava, then SSW to Bosanski Novi, and ESE through Prijedor. It enters the city from the N.

A narrow gauge industrial line, belonging before the war, to the "Bosna A.D." Company, follows the Vrbanja river SE from Banja Luka through Kotor Varosh to the Shipra and Krushica mines (about 40 mi.) and serves both mining and lumber interests. 467/ A line under construction between Bosanski Novi and Knin will eventually give Banja Luka an outlet to the Adriatic at Split.

Communications. As the city was a Banovina capital, telephone and telegraph connections are good, particularly to the N. In 1938 the Banja Luka post office handled 1,671,889 pieces of mail, 30,262 telegrams and 4,576,921 telephone calls. 468/

A broadcasting station in Banja Luka was recently reported, on a wave length of 276 m. It is working on 200 watts. When completed it will be working on a full strength of 4 kw. 469/

Health. The climate is very healthy with only a slight tendency toward typhus, dyptheria and malaria.

The state hospital had 6 doctors, a staff of 31, and 210 beds in 1937, 470/ and there was a health institute, a tuberculosis dispensary, a mobile dispensary and a school clinic. 471/ Sewage is taken care of by the Vrbas river. Sewers are adequate only in the new city.

Municipal government. Prior to the war Banja Luka had all the banovina and county administrative offices. The municipal government was headed by the mayor, who acted with the aid of the municipal council. The city is now within the Croatian state. There has been considerable Chetnik activity recently in the area and the city is probably under military control. Present prefect of Banja Luka is Dr. von Harovich. 472/

3. Bitolj (Monastir)

Importance. Bitolj (Bulgarian: Bitolia,) is a transportation point of considerable importance. Before the present war it was the seat of an Orthodox bishop and an Orthodox seminary, had several other schools, and was the headquarters of a military district. 473/ Under Bulgarian occupation the city is the center of one of the two administrative regions (oblasts) in Bulgarian Yugoslavia.

Location. The coordinates of Bitolj are 41°2' N., 21° 21' E; elevation is 1,916 feet. 474/ Bitolj is on the W edge of a large plain near the former Greek frontier, 20 miles north of Florina. The Dragor, which flows into the Crna about 5 miles east of Bitolj, traverses the city from west to east; a smaller stream flows through the south-west part of the city. A little SW and W of the city are high mountain topped by the 8,530-foot Perister Peak. Hills encircle the city on the NW. West of Bitolj are the large Prespa and Ohrid lakes. 475 /

Description. Bitolj was a flourishing city in 1914, but it suffered heavily during the first World War, and has never fully recovered. It has a number of large mosques, a covered Turkish bazaar, 476/ and a large Orthodox church (Sv. Dimitri). 477/ The military barracks are located on the SW side. Many of the streets are narrow and paved with cobblestones, but the main streets are straight and wide. There is a considerable number of small shops. Bitolj has many gardens and much vegetation. 478/ A massive German war memorial from the last war, built like a fortress, dominates the city from a nearby hill. 479 /

Climate. The climate is characterized by hot summers and cold winters. During the First World War the British in Macedonia were troubled by heat and insects during the summer, and especially by dust storms. Violent rainstorms in the spring and autumn caused floods, and in winter blizzards occasionally swept down from the north, and in normal years the temperature range is 12.2°F to 96.8° F. The average annual temperature is about 53.1°F. Rainfall is about 20 inches. Prevailing winds are NW and SW. Atmospheric pressure averages 718.5 millibars. There are on the average 93 rainy, 21 snowy and 8 foggy days a year. 480 /

Population. The population is very mixed. Out of a total of 33,024 in 1931, Serbs, Macedonians, and Greeks comprised 22,362, and Turks and Albanians about 9,000. 481 /

The occupational division of the actively employed people in 1931 was as follows:

Agriculture, forestry, fishing	1,699
Industry and handicrafts	4,607
Commerce and communications	2,392
Government, liberal professions and army	2,359
Others	2,228
Total	13,285

The proportions and figures have probably varied little since 1931 and the total population is now probably about 34,000. The return of some refugees from Bulgaria may have increased this figure. 482/

Utilities. In 1941 there was a small thermal power plant which supplied electric light. The Bulgarian authorities were planning to obtain a new water supply from Mt. Perister, in order to reduce the danger from typhoid. 483 / No information is available concerning other utilities.

Industry. In 1934, factories included a flour mill and a saw mill, as well as a woolen cloth factory and a soap factory. 484 / Manufacturing is still carried on largely in small artisan shops.

Supplies. Many food products are available, including fruits, vegetables, chickens, goats, cattle. Rice and tobacco are grown in the vicinity, 485 / and fish are obtainable from Prespa and Ohrid.

Highways. Bitolj is on the main highway between Skoplje (92 miles) and Larissa. At Prilep, north of Bitolj, the highway divides, one branch going via Gradsko and the other via Veles. At Florina in Greece, 20 miles south of Bitolj, roads go east to Salonika and west to Korcha, Albania.

West of Bitolj a good road goes via Resan (branch left to Korcha) to Ohrid (45 miles) and Struga. Here it connects with a road north to Debar - Tetovo - Skoplje, and south with the Albanian highway running between Korcha and Elbasan - Tirana.

North of Bitolj a secondary mountain road leads to Kichevo.

Local Transportation. In 1937 a bus line ran from Skoplje to Bitolj (123 miles) via Tetovo, Gostivar and Kichevo; another ran from Gradsko to Bitolj and on to Ohrid (45 miles). 486 / Since 1941 there has been regular bus service from Sofia, via Kiustendil and Skoplje. Horses and automobiles are available in normal times, and there probably were limited garage facilities before the invasion.

Railways. A normal gauge railway line runs from Skoplje to Bitolj (114 miles) via Veles, and on to Salonika (252 miles). 487 / The station is on the SE side of the city separated from it by a large open area used for drilling.

Air Transportation. There is a civilian air-field at Bitolj. In 1939 service was provided between Skoplje and Salonika via Bitolj on Sundays from May to September. 488 /

Communications. Bitolj had a post office, and telegraph and telephone connections in 1941. 489 / There were no radio broadcasting or radio telegraph facilities.

Health and Sanitation. The city hospital had about 110 beds, 3 doctors and a technical staff of 23 in 1935. A 400-bed hospital was under construction near the barracks. 490 / Sanitary conditions were said to be primitive.

Malaria is probably still prevalent, although before the invasion in 1941, much had been done to eliminate it and further drainage of swamps has since been reported. 491 / A report in 1936 stated that under the Institute for Malaria Research at Skoplje there were 13 sanitary districts. Each district had a resident doctor in charge of a public health

center with a bacteriological station, clinic, shower baths, a veterinary section, and a motor and ambulance service to reach the outlying villages. Thanks to this, in two years the malaria victims at Bitolj declined from 23,056 to 8,155.

Typhus and cholera epidemics have taken place in the past. 492/ During the years 1934 - 1937 pulmonary tuberculosis caused 247 deaths, or 11.38 per cent of the total deaths during the period. 493/

Municipal Government. Bitolj before the war was governed by a mayor and an elected council. It was the seat of a county, headed by a director. Now it is in the region annexed by Bulgaria, and is the administrative center of an oblast (region). Bulgarian institutions have been introduced, and the city is governed by officials appointed by the government in Sofia. The oblast director in 1941 was Hristo Gutsov; the economic director, Ivan Demirov; the mayor Ilia Nenchev; and the assistant mayor, Dr. Konstantin Robev. 494/

Military considerations. The following points are worth noting:

1. Bitolj is the largest city on the Salonica-Florina-Veles railway line (an alternate for the Veles-Djevdjelija-Salonica line). These lines are the only railway connections between Greece and Western Europe.

2. The city is located at important highway crossroads: Bitolj-Chrid-Debar; Bitolj-Veles-Skoplje; and Bitolj-Florina-Salonica.

3. The city is coveted by all neighbors--Greeks, Albanians and the Bulgars.

4. The city played an important part in the last World War's Salonica front strategy.

5. Food supply may be inadequate.

4. Celje (Celli)

Importance. Celje is surrounded by 11 coal and metal mining towns, and is the home of some of the largest chemical industries in Yugoslavia. In addition it is the wholesale commercial center of central Slovenia. Economical and politically Celje is the center of the entire region between Pohorje and the Sava. It occupies an important position on the Vienna-Ljubljana-Trieste railway line, and the Ljubljana-Maribor highway. Under the Yugoslav government it quartered a company of gendarmes, the 39th infantry regiment, and was the headquarters of the Celje army area command.

Location. The city is located at the confluence of the Savinja and the Voglajna rivers, at the south end of the fertile and densely populated Savinja Valley, and at the foot of fairly high, wooded hills. The Savinja enters a narrow valley S of the town. The area around Celje is healthy and very beautiful. Coordinates are 46°14' N.: 15°17' E. Elevation 791 ft.

Description of the city. Celje is situated on both banks of the Savinja, which floods frequently. There is a fine city park on the river. Celje has many historical buildings, including four old fortresses, some of which were used by the Yugoslav government as military barracks. Prior to the German invasion, it had a mining school, two secondary schools, a playhouse and a museum. The dominant structures in the city are its 5 and 6-story commercial houses.

Climate. Although there is less fog than in Ljubljana, the climate is damp. The average annual precipitation is 47.2 inches.

Population. In 1931 there were 7,602 inhabitants. On the basis of religious belief, the population was divided

Orthodox	337
Roman Catholic	6,967
Protestant	164
Other Christian	11
Moslem	97
Others	26

The population is predominantly Slovene. In 1921 there were only 848 Germans. 496/

Utilities. The city has an electric power plant, gas works, a slaughter house and a water system. The sewer system is probably adequate, with sewage disposal taken care of by the two rivers flowing through the town. 497/

In addition to electric power supplied by the different factories, principally the Western Company, the Celje electric plant receives bulk power from a station at Fale. In 1931, 1,050,000 kw. were consumed, almost two-thirds being used for lighting. Twenty-one transformers are used. City power has averaged 210/120 volts, with the suburbs using 380/220 volts. Maximum load is 400 kw. 498/

Industry. Industry is well developed, especially in such nearby localities as Gaberje and Spodnja Hudinja. About 3 miles east, in Shtore, an iron foundry operates, using coal from a nearby mine. This foundry is the largest of its kind in the Celje sector. It is equipped with a rolling mill, tool and die casting equipment, and a structural steel department. Its annual capacity used to be 18,000 tons of iron products, and 3,600 tons of various construction materials. It used to employ about 350 workers. 499/

Another nearby factory, the "Prazharna" chemical plant, formerly employed 100 workers and used to consume

20 tons of zinc ore and produce about 20 tons of sulphuric acid daily. 500/

In the pre-war period the largest industrial enterprise was the "Peter Majdich Company". Its main branch at Shtore produced all types of fireproof bricks, roofing, and other materials used in arsenals, steel mills, and similar manufacturing establishments. The factory employed over 150 workers and used domestic raw materials to the extent of 80 per cent. Some special clay had to be imported. Production was over 800 carloads annually. 501/

Other important factories of the pre-war period were the following:

(1) A woolen mill at Shkofja (3 m. N. of Celje), which was managed by the "Peter Majdich Company" and which, to a large extent, supplied the Yugoslav army, navy and hospitals. 502/

(2) "Zinkarna" factory, employing over 500 workers, which produced 11 tons of zinc oxide, 5.5 tons of zinc blocks or zinc plates, and 16.5 tons of sulphuric acid daily, as well as lead plates, paints, and aluminum. Ten ovens were used for zinc processing. 503/

(3) The Weston Company which, with 1,500 workers, produced 16 to 22 tons of high quality enamelware a day. 504/

(4) The Chemical factory at Gaberje (1 mile N of Celje), which produced in 1930, 10,000 tons of sulphuric acid, 1,700 tons of hydrochloric acid, 3,500 tons of crystalline soda, 1,000 tons of Glauber salts, and 3,000 tons of phosphates. 505/

(5) The Praora Viljem Company, which employed 60 workers and produced aniline dyes, paints, blueing, bleaches, borax,

various other cleaning preparations, photographic chemicals and indigo. 506/

(6) The Hrastnik Chemical Factory, about 10 miles southwest of Celje, which employed 150 workers and which, with power obtained from the Fala Electric Plant, produced 150 carloads of hydrochloric acid, 30 carloads of potassium salts, 400 carloads of crystalline soda, 140 carloads of Glauber salts, 300 carloads of superphosphates (capacity 2,000), 60 carloads of bicarbonate of soda and 300 carloads of red dye. 507/

(7) A glass factory at Hrastnik, which employed 1,100 workers and produced all types of mold and rolled glass products. Its capacity in 1931 was 3,300 tons. The firm which owned this establishment - "Zedinjene Tovarne Stekla, D. D.", of Zagreb - had three other glass factories: (Rogashka Slatina, Straza near Rogatec, and Daruvar) which employed over 900 workers. All of these were in Slovenia, relatively close to Celje. 508/

(8) A soap factory at Celje, which consumed annually about 200 tons of various raw materials. 509/

(9) A lumber mill at Spodnja Hudinja, near Celje, which produced annually 2,616 cubic yards of lumber, primarily for the State Railways. 510/

(10) A factory at Petrovche (3.5 miles W of Celje), which employed 150 workers and produced all kinds of medical, sanitary and other goods. It had a machine for clay purification. 511/

(11) A coal mine at Zabukovica (4 miles W of Celje), which produced daily from 12 to 14 carloads of brown coal. This plant employed 330 workers, 180 of whom were miners. 512/

(over)

(12) The Knez & Pachiaffo workshop at Celje, which produced articles of gold and silver. It consumed annually 60 kilograms of gold and 500 kilograms of silver and employed about100 workers. 513/

(13)The "Polzela" knitting mill, which employed approximately 300 workers and produced annually about 200,000 dozen pairs of stockings. Practically all of the output was consumed in Yugoslavia. 514/

Distilleries and a lime and carbide plant should also be included in the list of Celje pre-war industrial establishments.

Supplies. Under normal conditions there is a sufficiency of food and fodder. As elsewhere in Yugoslavia, there is lack of oil in Celje, but coal is abundant. Since lumbering is an important local industry, there is usually a considerable amount of building materials, especially wood. Goods of all kinds, including chemicals, metalware, and agricultural commodities (particularly hops) are stored in the wholesale warehouses.

Highways. Celje has very good highway connections with all important Yugoslav centers: Celje - Maribor (39 mi.); Celje - Ljubljana (43.6 mi.); Celje - Zagreb 70.8 mi.

Transportation. There are no street railways. Automobile and bus service was formerly well developed. There also used to be automobile service between the following points: Celje - Maribor; Celje - Konjice; Celje - Dobrna; Celje - Vitanje; Celje - Vransko, and with the small neighboring industrial towns.

In 1935 there were six automobile garages, three automobile body workshops, and seven automobile repair shops. 515/

(1320)

Railways. The significance of Celje is due in part to its good railway connections. It is on the Vienna - Ljubljana - Trieste trunk line and is also connected with Germany via Lavamind. Connections with Zagreb and Belgrade are via Zidani Most, about 15 miles south of Celje.

Communications. In 1938 the Celje post office handled 3,112,732 pieces of mail, 17,057 telegrams, and 2,803,076 telephone calls. 516/ Except for radio, Celje has adequate communications with other Yugoslav cities.

Health and Sanitation. Pre-war Celje was a very clean and healthy city. It possessed a fairly large public hospital which had 405 beds in 1937 and handled 8,706 patients. 517/ In 1935 the hospital had 9 doctors and a technical staff of 83. 518/ In 1932 there were 20 private doctors and dentists. 519/

Municipal Government. Celje was one of the "free" or autonomous cities in Yugoslavia. Details are lacking regarding municipal government, but it is believed that it had a City Senate, which exercised legislative functions. It probably enjoyed fiscal autonomy in all local matters, and its budget was not supervised by the Ministry of Finance. City administration, however, was directly under the Ministry of the Interior. The city was governed by a mayor chosen by its inhabitants. The towns around Celje formed a separate township. 520/ Celje was a county seat, and had regional and county courts, an administrative court for the Drava Banovina, and many other administrative offices. 521/

Newspapers. In 1932 Celje had at least three newspapers: Deutsche Zeitung, published in German and appearing twice a week; Nova Doba (New Era) appearing three times a week; and Slovenski Gospodar appearing twice a month. 522/

(1320)

5. Cetinje

Importance. Cetinje, former capital of the Kingdom of Montenegro, and later of Zetska Banovina, is important chiefly as an administrative and communication center. It has little commerce or industry.

Location. The city is situated at an altitude of 2,205 feet, on a plain surrounded by mountains, 523/ and is located at 42°23' N. latitude, and 18°56' E. longitude. 524/ It is about 12 miles east of the Bay of Kotor. The city is dominated on the W. by Mount Lovchen, with an elevation of 5,771 feet. Lake Skadar (Scutari) is about 15 miles S. E. of the town. 525/

Description. Cetinje, while small, has wide streets and a few large buildings. The former royal residence, the Biljaida (a sort of fortified mansion), and a large convent are the most imposing buildings. There are also barracks, an ancient tower, and the Zetski Dom, a former administration building, housing a theater, public hall, and the like. 526/ There are one or two relatively large hotels. Most of the houses are one and two-story. On the north side, along the highway to Kotor, the town takes on a semi-rural character. The long main street traverses the town from north to south.

Climate. Cetinje has a moderate climate, but is the wettest city in Yugoslavia. Precipitation averaged 157.9 inches in 1929-32 and was 126.7 inches in 1938. Annual mean temperature is 50.9° F. The mean temperature in January, 1938, was 30.6° F.; in June, 1938, 71.2° F. Prevailing winds are SW and W, followed by NE, but it is generally calm. Atmospheric pressure is 701 to 705 millibars. On the average there are about 125 rainy, 25 snowy, 12 foggy, and 35 stormy days. 527/

(1320)

Population. In 1931 there were 8,646 inhabitants, 528/ most of whom were Serbs, of Orthodox faith. There has been little or no city growth since.

Utilities. Water is abundant, but installations are primitive, and a sewer system is virtually non-existent. Electric power is available from Plants at Podgorica and Hercegnovi.

Industry. Very little manufacturing is carried on. In 1934 there were two sawmills. 529/

Supplies. Little information is available, but the following supplies can ordinarily be obtained: lumber, fish from the Adriatic and Lake Skadar (Scutari), mutton, chee

Highway Connections. A road up the mountain-side from Kotor climbs by hairpin turns from 28 miles to Cetinje. 530/ Another winding road leads E along a gorge to Rijeka continuing to Podgorica and Pech (153.5 miles), while a branch from Rijeka goes to Bar (Antivari) and Ulcinj on the coast. From Podgorica an important road goes to Scutari, in Albania. These roads are all mountainous, are cut through rock, and are rough but passable.

South of Cetinje a highway goes to Budva, on the coa Branching from it on the right is a road to the top of Mt. L chen.

Local Transportation. Before the present war there was regular bus service from Cetinje to Kotor, to Pech, to Ulcinj, and to Podgorica and Kolashin. 531/ As Cetinje was a tourist center, automobiles and horse transport were probaly available. Repair facilities were limited.

Communications. Cetinje was the headquarters of one of the administrative districts of the Ministry of Posts, Telegraphs, and Telephones, and had connections with all part of the kingdom. 532/ There were no radio telegraph or broad

casting facilities in 1938. There were 2,480 radio receiving sets in the Cetinje district in 1938. 533/ A cable from Iga on the Adriatic, not far from Cetinje, to Nabel, Tunis, was opened in January, 1937.

Health and Sanitation. Information is lacking concerning health conditions in the city. There is a tendency toward typhoid, typhus and diptheria epidemics, and because of the moisture malaria is prevalent. 534/ At the Institute of Hygiene in Cetinje, 22,299 persons were examined for malaria in 1938. 535/

Local Government. Cetinje was formerly the capital of Zetska Banovina, with an appointed Ban, and was the seat of the County Director (Nachelnik). The city government is the same as outlined in the main text. Since the conquest by the Axis, Montenegro has been under Italian occupation. The Italians proclaimed the nominal independence of Montenegro, with Cetinje as the capital.

Newspapers. Prior to the German invasion, Zetski Glasnik (Zeta Herald) was published here.

Military Considerations.

1. The terrain is very good for guerrilla tactics. Practically no branch roads exist. Wooded and rocky mountain regions offer natural barriers to modern armies.

2. Food is inadequate even in normal times. Fodder and clothing are far from adequate.

3. The local inhabitants are excellent guerrilla fighters.

4. The people are reported to be politically disunited. Some are followers of General Mihailovich and of the Communists, and therefore favor the restoration of Yugoslavia. Others (forming a small separatist group) are seeking Italian support in their attempt to restore the old Montenegrin Kingdom.

6. Dubrovnik (Ragusa)

Importance. Dubrovnik is one of the leading Yugoslav seaports with highway and narrow-gauge railroad connections to the interior of the country.

Location. Dubrovnik is located at the southern end of Yugoslavia's Adriatic coast at 42°39' N., 18°9' E., 536/ almost opposite the Italian port of Bari. It is built on a small peninsula jutting out from the mountainous shore and is dominated from the N by Brdo Srdj, a mountain 1,352 ft. high. 537/

Description of City. The old city, with its massive medieval fortifications is still intact. The area within the fortifications is only about 450 square yards and is not entered by wheeled vehicles. The stone paved streets are almost all very narrow (some in the form of steps) and the houses are of stone. The Stradun, or Placa Kralja Petra, is the main street and is of considerable width. The walled city contains an arsenal, a military hospital, barracks the town hall, the old rector's palace, a cathedral, and three large, massive monasteries. The Mincheta Tower is at the northwest corner of the walls. 538/ The new city extends northwestward along the shore. The old harbor east of the city is too shallow for modern vessels, which now use the port of Gruzh (also known as Dubrovnik II), 1.6 milesnorthwest Dubrovnik proper. A naval college and the railway station are in Gruzh. (See accompanying city plan and map).

Climate. The winters are warm and pleasant, free from the bora, the northerly storms of the Adriatic. The summers are quite warm. The average annual temperature is about 60° F. 539/

Population. In 1931 there were 18,765 inhabitants in the commune of Dubrovnik; of these 10,076 lived in the city itself. 540/ The population is mixed, with Croats and Serbs predominating. 541/

According to religious affiliation the population was divided as follows in 1931: 542/

Orthodox	2,003
Roman Catholics	16,147
Protestants	83
Other Christians	99
Moslems	299
Others	134
Total	18,765

In 1938 there were 360 professional fishermen and 2,914 part-time fishermen in the Dubrovnik port district. 543/ Other occupations are the tourist trade, commerce and transportation

Utilities. There is a municipal electric plant, and an ice plant; 544/ no information is available as to their capacity, except that the city has an adequate electric light system. The nearby river Ombla can supply the city with sufficient water at present, and should meet any future needs. The sewer system which empties into the Adriatic, is fair.

Industry. Dubrovnik has little industry, and what there is is of small size. Barrels and baskets are made, and there

are two sawmills. Cognac and wine are produced. Other local products are floor wax, vegetable oils, and tinware. 545/

Supplies. In 1938 the port district had a catch of 2,551,952 lbs. of fish and shellfish. 546/ Dubrovnik is very important for its shipping facilities, and its seaborne commerce greatly affects the supply situation. (See Principal Ports and Harbors in Appendix B). In 1939, over 292,600 tons of raw materials and goods were exported through Dubrovnik, and 34,100 tons were imported. The most important exports of that year are shown in the following table: 547/

	Exports (in tons)	Imports (ton
Agricultural products	6,084	2,305
Minerals (Chiefly coal)	74,403	27,257
Chemical products, etc.	956	2,926
Metalic products	27,882	613

Among the agricultural commodities normally exported are onions, olive oil, wine, and medicinal plants, while 548 such products as eggs, figs, grapes, oranges, lemons, vegetables, and cheese are offered for sale on the local market.

The immediate hinterland is the poverty-stricken Karst region which has insufficient supplies even under normal conditions. Dubrovnik is dependent for its subsistence on the more fertile Yugoslav regions to the north.

Highways. A mountain road runs up the coast to Split, 146 miles to the northwest, and a well kept up road runs southeast to Kotor and Cetinje, 85 miles. 549/ Another mountain road runs north to Mostar (97.5 miles), and to Sarajevo (193.8 miles from Dubrovnik). 550/ A fourth road runs inland to Uzhice and Belgrade (325 miles), via Trebinje, Nikshich and Plevlje. 551/

Local Transportation. In 1938 Dubrovnik had 3.7 miles of street car line, with 14 cars. The system carried 1,394,680 passengers in 1938, and ran between Dubrovnik I and Dubrovnik II (Gruzh). 552/ Buses run from Dubrovnik to Trebinje, Bilecha, Mostar, Sarajevo, and Cetinje. 553/ Automobiles and carriages were normally available for tourists. Repair facilties are fair. In 1935, four firms sold auto parts, one auto tires, and six firms ran bus services. 554/

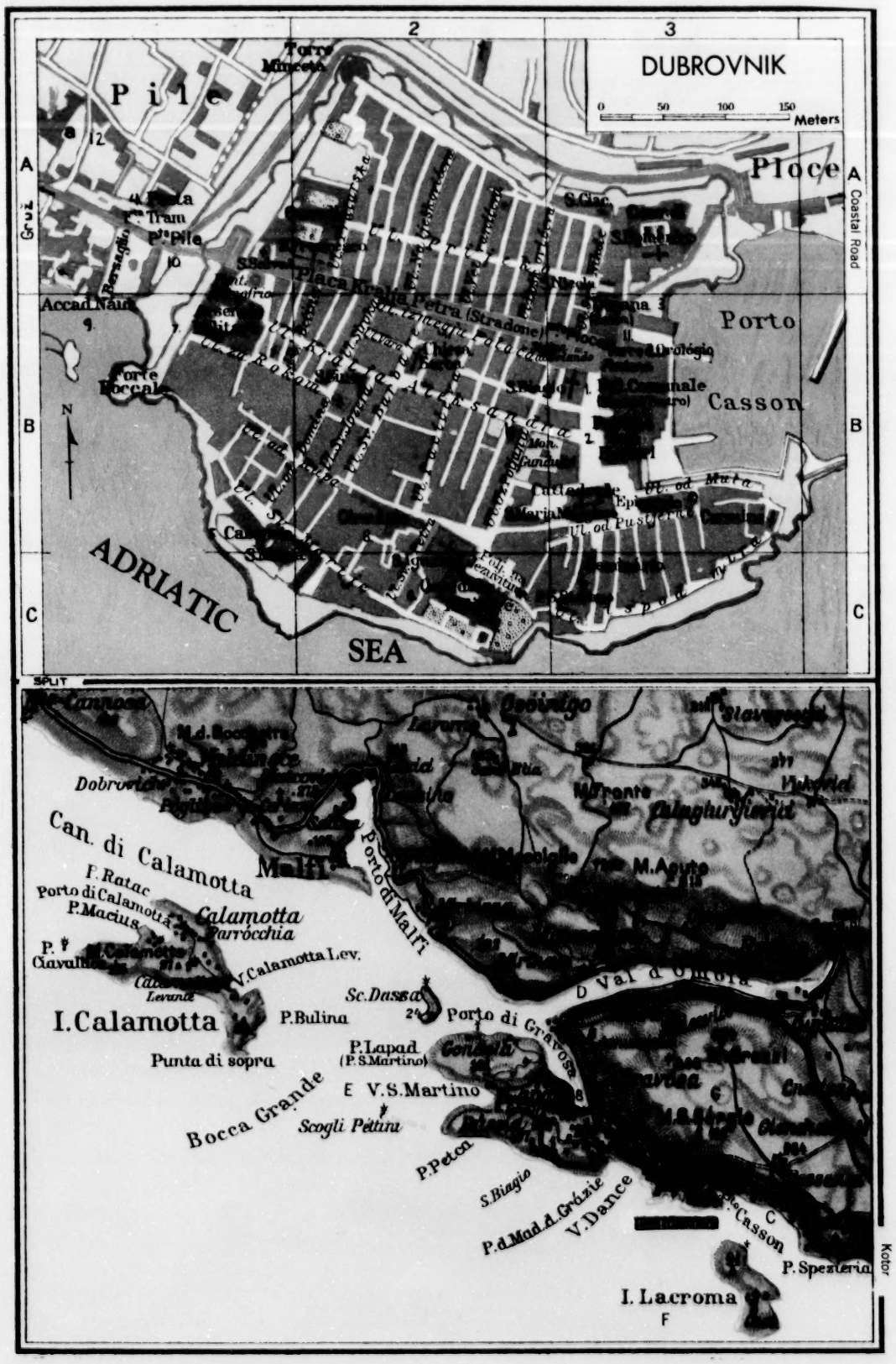
Railways. Dubrovnik has narrow-gauge connections only, with Hercegnovi, on the Bay of Kotor (51 miles to the southeast); with Trebinje, Bilecha and Nikshich (93 miles northeast); and with Mostar and Sarajevo (175 miles north). There are connections (via Sarajevo) with other parts of the country. 555/

Although narrow gauge, the Dubrovnik-Sarajevo-Belgrade line is of considerable economic and strategic value, because it is the only railway which connects the Yugoslav hinterland with the southern Adriatic coast. In 1938 there were several fast motor rail car runs weekly between Belgrade and Dubrovnik

Air Transportation. In 1939 there was daily air service in each direction over the line Belgrade-Sarajevo-Dubrovnik, during the summer season. 556/ The airfield of Dubrovnik was

Sarajevo-Dubrovnik line intensively for supplying naval units stationed at Dubrovnik and Boka Kotorska.

5. Strongest guerrilla activity is to be found immediately to the north and northeast. The people in this district are friendly and pro-ally, especially in adjacent districts of Herzegovina and Montenegro.



KEY TO NAMES

Ul. (Ulica) - Street Placa - Square Polj. (Poljana) - Square

Dubrovnik Town Plan

1. Pal Comunale - Municipal Building
2. Palazzo dei Rettori - Rectors' Palace
3. Dogana - Old Customs House
4. Posta - Former Postoffice
5. Caserna S. Maria - Barracks (former Cloister of S. Maria)
6. Ospedale Militare - Military Hospital
7. Arsenale Militare - Military Commandants Office
8. Ginnasio - "City School"
9. Accad. Naut. - Merchant Naval School
10. Pta. Pile - Pile Gate
11. Pta. Ploce - Ploce Gate
12. a - Hotel Imperial

Dubrovnik and Vicinity

A. Gravosa - Gruž
B. Porto di Gravosa - Port of Gruž
C. Pto. Casson - Port Kase (Old Port of Dubrovnik)
D. Val d' Ombla - Dubrovacka Inlet
E. V. S. Martino - Sumartin Bay
F. I. Lacroma - Lokrum Island
G. M. S. Sergio - Srdj Hill

MAP NO. 2758
8 NOVEMBER 1943
LITHOGRAPHED IN REPRODUCTION BRANCH, OSS

The maximum temperature recorded in 1938 was 90.7° F., in June; and the minimum temperature was -4.4° F., in December. 571/ The mean of the hottest month (July) is 68.7° F., of the coldest (January) 27.9°.

The average annual humidity is 82--highest being in January (90), November (91) and December (91), and the lowest in March (75) to July (76).

In 1938 there were 112 rainy, 25 snowy, 59 foggy and 21 stormy days. The normal barometric pressure was 735.4 millibars. 572/

Population. According to the last census in 1931, Ljubljana had 59,765 inhabitants. 573/ By 1937 the city had a population of 79,056, after having absorbed several neighboring communes. Recent estimates place the figure at about 85,000. 574/

The occupational structure of the population in 1931 is shown in the following table:

Agriculture, forestry, fishing	1,550
Industry	16,403
Commerce, credit and communications	14,348
Public service, liberal professions, army	13,688
Other occupations	13,776
Total	59,765

The population is predominently Slovene. In 1928 there were only about 3,200 Serbs and Croats. Other Slavs were Czechoslovaks (600) and Russians (200). Non-Slavs were Germans (1,770), Italians (162), French (28), and Jews (82). All these figures date from before the 1931 census, but the proportions are approximately the same today, except for the influx of Italian officials. 575/

Ljubljana is pre-eminently Catholic. The 1931 figures are: 576/

Roman Catholic	56,708
Orthodox	2,122
Protestants	320
Other Christians	78
Moslems	368
Others	169
Total	59,765

Most of the Slovenes support the Slovene People's Party, the leaders of which are in the present Yugoslav government. About 30 per cent of Slovene voters formerly belonged to other Yugoslav parties: the Yugoslav National Party, Independent Democratic Party, and Socialist Party. The Communist Party was forbidden, but it retained its underground system, and is at present very active. The Slovene guerrillas are probably Communist led. On the eve of the Yugoslav-German war all Slovene parties, excepting the Communist, issued a joint declaration and established a "Slovene National Committee." There is now a Slovenian National Socialist Party composed

largely of Germans who live in Slovenia.

Utilities. Water is reported to be excellent and abundant. It comes from about 5 miles northwest of the city, where it is filtered through sand. The water-works are situated at this point. 577/

The city has sufficient electric power, since power plants are most numerous in Ljubljana region (Dravska Banovina). The generating sets of the Ljubljana plant consisted of a steam engine of 1,600 h.p. and a Diesel engine of 2 x 450 h.p. Generating and transmission voltages were 300 v. and 6,000 v. in 1937. Consumers' voltage was 110 v. and industrial power 110 to 380 v. A.C.: Maximum tension recorde was 1,400 kw. 578/

There is a gas plant, but there are no figures available regarding its capacity, or the extent of gas that is used in the city. 579/ Prior to the war there were two ice producing plants and a relatively adequate sewage system.

Industry. Yugoslav industry centered pre-eminently in the region of Ljubljana. This was due to abundance of coal, water power, and excellent railway and road communications. Principal industries included chemicals, wood products, textiles, metals, tobacco products, and building materials. Some of the more important industrial concerns are listed bel

(1) Akcijska druzhba za kemichno industrijo produced chemicals of all kinds, which were exported to Italy, France, Germany, England and overseas. Products were of high quality, and included organic fertilizers, bone grease, gellatin, etc. 580/

(2) A chemical factory at Moste, near Ljubljana, employed between 120 and 140 workers in 1939. Its exports consisted mostly of aluminum sulphate and sodium derivatives, and it was equipped to convert bauxite into various aluminum products. 581/

(3) The Medich-Zankl chemical factory at Medvode, near Ljubljana, produced all kinds of oils and dyes for the aeroplane, railway and shipping industries. The entire processing was done by electric power. Most of the raw materials were obtained locally.

(4) "JUB" dye factory produced annually around 150 carloads of dyes. The factory was located at Dol, near Ljubljana. 583/

(5) The Yugoslav Printing firm (Jugoslovenska tiskarna) employed around 300 workers and printed all types of materials, periodicals and books.

(6) A large paper factory produced all types of paper products. The factory used 1,100 h.p. motors, and consumed 5,300 tons of raw materials per year. It employed 240 workers and produced much of the finer paper previously imported from abroad. 584/

(7) The United Paper Factories at Vevche, Gorichane and Medvode (all suburbs of Ljubljana) employed about 700 workers. The annual production was about 16,500 tons. 585/

(8) The "Automontazha" Company employed about 50 workers and 10 technicians to build auto bodies and sold certain automobile parts. 586/

(9) The "Saturnus" sheet metal company at Moste, near Ljubljana, employed about 350 workers. The annual output was valued at $400,000. 587/ According to recent reports, one of its branches has been producing gas masks.

(10) The "Seta" company produced all kinds of light iron products--such as nails, and was equipped with modern machinery. Its motors generated 125 h.p. About 80 workers were employed in 1939. It produced for export. 588/

(11) The Dragotin Hribar Knitting and Textile Firm produced yearly over 120,000 pairs of stockings and socks, and almost as much of other similar products. 589/

(12) The brewery "Union" had an annual capacity of about 5,300,000 gallons, only 20 per cent of which was being used in 1938. There were about 250 regular employees. 590/

Other products manufactured in pre-war Ljubljana include lumber, furniture, and building materials; leather goods, cotton and linen goods, cement; and machinery.

For the most part Ljubljana industries are small and their output barely satisfies local requirements.

Supplies. Food available locally includes large quantities of pork and other meat products, vegetables, fruit, and sugar from a local factory. Grain would have to be imported if troop concentrations are planned. Fodder can be obtained locally, as well as cord wood, gas, and such minerals as zinc ore, lead ore, kaolin clay and chalk. Important coal mines in the vicinity of Ljubljana supply coal for the railroads and many factories. Petroleum products are scarce, but there are storage tanks with a capacity of 138 tons.

Highway Connections. Highways connect Ljubljana with all Yugoslav cities and with neighboring foreign countries. A plan drawn up in 1937 provided for the building of additional roads in Slovenia to link such highways together. The contracts called for two-layer concrete pavement, 19.7 ft. wide, with 3 ft. shoulders. 591/

The roads to Tavrisio (67 miles), Trieste (68 miles), Fiume (93 miles), Villach (86 miles) and Klagenfurt (52 miles are main thoroughfares and in good condition. Two good highways run to Zagreb--via Celje (117 miles), and via Novo Mesto (93 miles). In addition to road connections via Trieste, Fiume, and Sushak Karlovac, the Adriatic can be reached by a highway from Ljubljana to Split (292 miles).

There are three highways connecting Ljubljana with Belgrade. One runs via Karlovac, Banja Luka and Tuzla (471 miles); a second via Novo Mesto and Zagreb (382 miles); and a third via Ptuj, Varazhdin and Osijek (383 miles). The first of these three roads is generally in good repair, while the third is bad in wet weather between Osijek and Belgrade, but otherwise is quite satisfactory. 592/ For further information see section on Roads, p. 89.

(1320)

Local Transportation. Bus lines in the Ljubljana area were considered adequate before the present war. The following table indicates the extent of traffic and the supply of transport equipment in 1938: 593/

Bus Transportation in Drava Banovina, 1938

	Urban Buses	Interurban Buses
Bus lines	14	76
Length of lines (in km.)	50	2,297
Number of buses	17	116
Number of seats	469	2,655
Number of transported passengers	1,120,240	866,638

Since Ljubljana is the largest and most important city in Slovenia, it may be safely assumed that the greater part of the above bus traffic centers in and around it.

In 1938, motor vehicles, other than buses, included 2,306 private automobiles and taxicabs, 222 motorcycles with side cars, 2,484 motorcycles without side cars, 837 trucks, and 72 half-truck automobiles. There were also 22 trailers and 148,117 bicycles. 594/

Tramways served all parts of the city. The following table reveals the size of the tramway system and the extent of street car traffic in 1923: 595/

Exploited length of track	10.56 miles
Number of electric motor cars	30 (928 seat
Number of trailers	7 (169 "
Number of transported passengers	7,601,403
Number of car kilometers	1,743,921
Income (in dinars)	8,494,201

Railways. Connections exist with all larger Yugoslav cities, as well as with neighboring states. Two lines (one via Trieste and Vienna and the other via Trieste and Munich) connect Ljubljana with Germany and Italy; and a third line (via Zidani Most, Ptuj and Kotoriba) connect it with Hungary. There are two lines to Zagreb and Belgrade (one via Zidani Most and the other via Karlovac). Finally, there is a line to Split and Sushak (also via Karlovac). 596/

There are three railway stations in Ljubljana: Glavni kolodvor (Main Station), Gorenjski kolodvor (Upper Station), and Dolenjski kolodvor (Lower Station). The relative importance of these three stations is shown in the following table: 597/

In 1930	Glavni Kolodvor	Dolenjski Kolodvor	Gorenjski Kolodvor
Departure *			
Baggage and express goods (in tons)	892	39	85
Merchandise, etc. (in tons)	103,200	3,000	57,000
Arrival			
Baggage and express goods (in tons)	2,060	44	25
Merchandise, etc. (in tons)	388,000	8,631	160,300

* In the same year, 991,477 passengers departed from the Glavni Station, as compared with 66,708 from the Dolenjski Station, and 102,601 from the Gorenjski Station.

Air Transportation. There is an airport located at 46° 03' N., 14° 34' 23" E. Before the present war it had a radio (call letters YPL), a hangar, repair facilities and a flying school. The field (4,265 by 3,412 feet in size) was located 6 kilometers east of the city at an altitude of 932 feet. 598/ According to recent information, this airfield has been enlarged to accommodate German bombers.

Communications. Ljubljana is the communications center of Slovenia (Dravska Banovina), and has good connections with other parts of the country. In 1938 there were 542 post offices, 309 telegraph offices and 310 telephone offices in the Banovina. The city itself had nine post, telephone and telegraph offices, 599/ and 18,857 radio subscribers. Two wireless telegraph and one broadcasting stations operated in 1938. 600/

Telegraph lines belonging to the Railway Administration parallel the railway lines and can supplement the regular net work.

Health and Sanitation. There are three large state hospitals. Number of beds and patients is shown in the following table: 601/

Hospital	Average daily no. of bed patients	No. of beds	Doctors	Technical staff	Nurses' helpers	Other helpers
Ljubljana-"Studenac"	686.25	841	6	15	112	66
Ljubljana-Women's	147.36	201	7	5	23	16
Ljubljana-General	904.90	900	41	34	167	66
Total	1,738.51	1,942	54	54	302	148

There are 6 smaller hospitals with from 25 to 50 beds each.

A Banovinal Health Institute was opened in 1938. It treats cancer patients and has all modern medical facilities. It has 30 beds and used to handle 25 to 30 patients daily.602

Municipal Government. In the Yugoslav state, Ljubljana was both the center of the Dravska Banovina and a county seat.

The banovinal government, headed by a Ban, was in charge of police protection, roads, public works, law, sanitation, etc. The Ban was appointed by the King.

The county administration dealt with matters within county jurisdiction: police administration, public works, roads, sanitation, law, agricultural and forest affairs, etc. The county Director (nachelnik) was appointed by the King and was responsible to the Ban.

At the head of the city government there was a Mayor, assisted by the City Council, which was elected by the citizens. These officials were in charge of local problems of sanitation, police protection, transportation, etc. The city-owned electric power plant and water system were also under their control.

At the present time Ljubljana is governed by the Italian Army. The High Commissioner of the Province of Ljubljana (Italian Slovenia) is Emilio Grazzioli.

Newspapers. Four important newspapers were formerly printed in Ljubljana: Jutro (Morning), Slovenec (The Slovene), Slovenski narod (Slovene People), and Sluzhbena tschajnica (Official Proceedings). Slovenec had the largest circulation and was the organ of the Slovene People's Party.

After the absorption of the Slovenes into the new order, Slovenec, Jutro, and Slovenski narod resumed publication under Italian supervision.

Leading Personalities and Government Officials. Two influential personalities--the leaders of the Slovene People's Party--are now members of the Yugoslav Government in London. These are Vice-Premier, Miho Krek, and Minister of State, Franc Snoj.

Military Considerations.

(a) Ljubljana was formerly the headquarters of the Dravska Division, 41st Infantry Regiment, one battalion of the 39th Infantry, and one artillery regiment of four batteries. Auxilliary troops were also stationed there.

(b) The city is a large and very important railway junction. It is near the former German and Italian borders and is encircled by high mountains.

(c) There are probably no permanent defenses in the city and its environs. The Yugoslavs declared it an open city on the eve of war with Germany.

(1320)

(d) There are excellent camp sites between Ljubljanica river and Gruberjev Canal. Two regiments of infantry could be accommodated easily. Forage and bedding could be obtained locally. It is estimated that a division of troops could be quartered in Ljubljana. Stabling is the most difficult problem. The artillery barracks and the race course have the only stables available. 603/

8. Maribor (Marburg)

Importance. Second largest Slovenian city. Political and economic center of the Slovenian Drava region. Highly industrialized. Important railway junction.

Location. The altitude of the city is 899 ft; its coordinates are 46° 34' N.; 15° 38' E. 604/ The city is surrounded by mountains of considerable height. It stands on the high banks of the Drava river, NE of the Pohorje range. The old city with its round towers and winding streets lies on the north (left) bank; the modern town with its factories and railway workshops has grown up on the south side. Suburbs include Studenci, Tezno and Lajtershper(Kalavarija Mountain (1,221 ft. high) is twenty minutes' walk from the city park. (See accompanying city plan and map). 605/

Description. There are many large public buildings. Important ones in the old city are at the N end of the main Drava bridge; the "Burg", or palace, and the Gothic Cathedral, with its twin towers are in the principal square. On the Mariborski otok (Maribor Island) a splendid new bathing establishment has been created. 606/

In addition to a number of public and secondary schools, Maribor had a teachers' college, commercial academy and several specialized agricultural and trade schools. 607/

There were four large hotels: Orel (58 rooms, auto garage); Meran (32 rooms, garage); Zamorc (35 rooms); and, Mariborski dvor (30 rooms).

The streets are hard surfaced, and the main streets are broad. 608/

Climate. Moderate, with exceptionally long and sunny autumn. The coldest days are in January, average 27.9° F.; and warmest in July, average 68° F. Annual precipitation is 38.3 inches. 609/

Population. In 1931 Maribor had 33,131 inhabitants. The occupational division of the actively employed inhabitants was as follows: 610/

Agriculture, forestry and fishing	383
Industry and handcraft	6,432
Commerce and Communications	4,124
Government, liberal professions, army	3,549
Others	4,374
Total	18,862

In 1931, out of a total of 33,921 (as reported by another source) there were 27,533 Slovenes, 2,931 Serbo-Croats, and 2,696 Germans. 611/

Religious groups were: 612/

Orthodox	1,219	Other Christians	66
Roman Catholics	30,794	Moslems	217
Protestants	674	Others	161

Utilities. The city owned the gas plant, electric power plant, water system, slaughter house and the bus transportati facilities. 613/

Due to its large size, the following document has been filmed in segments. The order of the segments is as follows: left to right, top to bottom.

TOWN PLAN OF LJUBLJANA

DATE PRIOR TO 1930

LEGEND

- RAILROAD
- RAILROAD AREA
- MAIN ROAD
- TRANSPORTATION BOTTLENECK
- PUBLIC BUILDING
- POTENTIAL OPEN STORAGE AREA
- INDUSTRIAL AREA
- AREA OF MILITARY IMPORTANCE
- BRIDGE

1 SLAUGHTERHOUSE
2 PUBLIC BATH
3 TECHNICAL COLLEGE
4 PEOPLE'S HOUSE
5 TOURIST OFFICE
6 OPERA
7 MUSEUM
8 MAIN POST AND TELEGRAPH OFFICE
9 AUTOMOBILE CLUB
10 BANOVINA GOVERNMENT BUILDING
11 CITY HALL
12 RESEARCH LIBRARY
13 KRALJEVA BANK
14 THEATRE
15 UNIVERSITY
16 POSTAL ADMINISTRATION BUILDING
17 DISTRICT ADMINISTRATION

HOTELS

H-1 HOTEL SLON
H-2 GRAND HOTEL UNION
H-3 STRUKELJE HOTEL
H-4 HOTEL MIKLIČ
H-5 HOTEL TIVOLI

SCALE NOT KNOWN

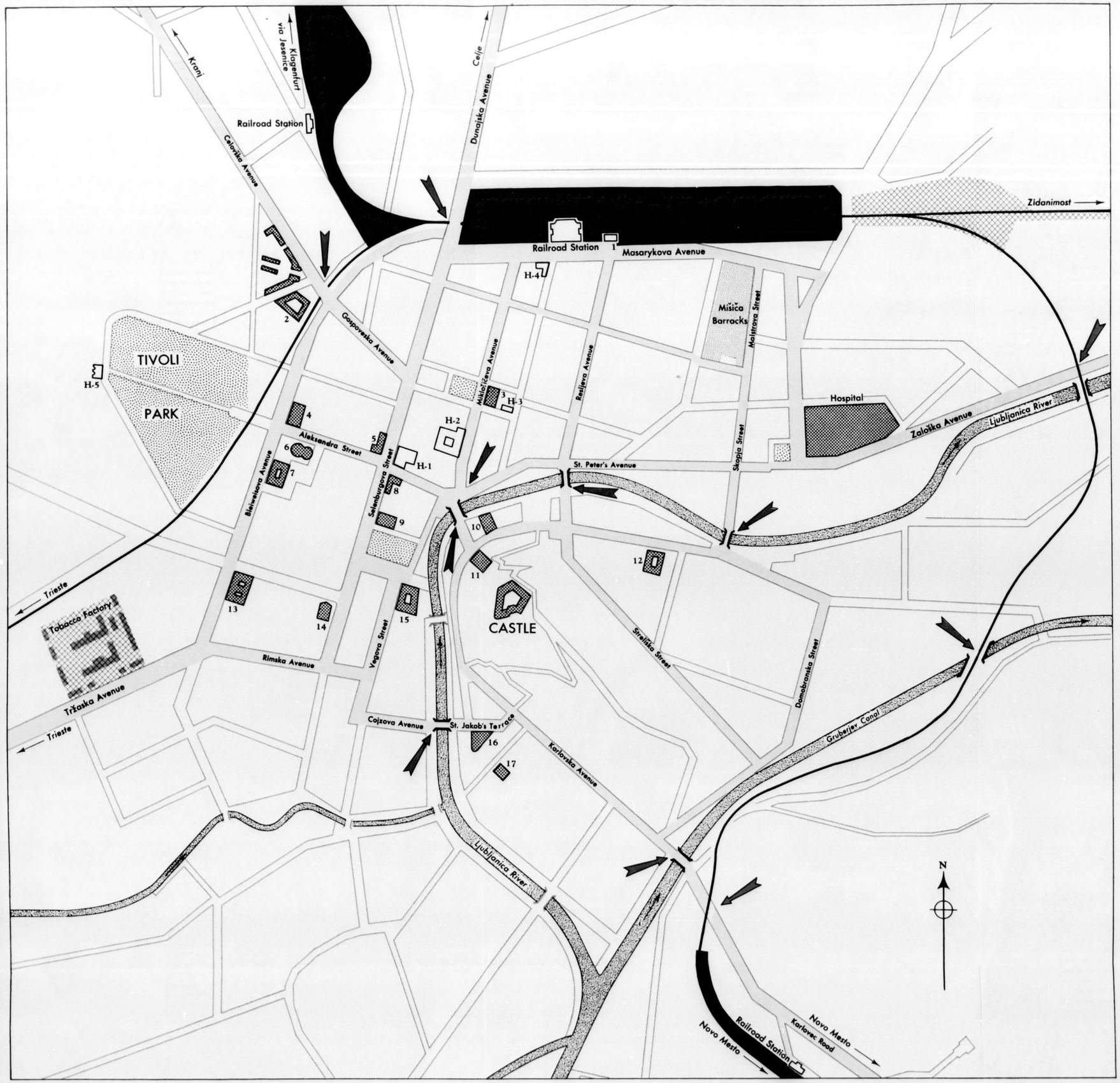
Reliability Code 2B-2B-2

MAP NO. 2803
17 NOVEMBER 1943

COMPILED AND DRAWN IN THE BRANCH OF RESEARCH AND ANALYSIS, OSS
LITHOGRAPHED IN THE REPRODUCTION BRANCH, OSS

TOWN PLAN OF LJUBLJANA

DATE PRIOR TO 1930



LEGEND

- RAILROAD
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- TRANSPORTATION BOTTLENECK
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COMPILED AND DRAWN IN THE BRANCH OF RESEARCH AND ANALYSIS, OSS
LITHOGRAPHED IN THE REPRODUCTION BRANCH, OSS

a) Gas. Used almost wholly as fuel. In 1937 the production amounted to 3,389,000 cubic feet. A new furnace was to be installed at that time, which would have enabled the gas works to produce other products including coke and coal tar. In 1939 there were 139,400 ft. of gas mains in the city. 614/

b) Electric power. Maribor and its industries are supplied largely from the Fala Power Station about 8 miles W of the city, on the Drava river. A power line to the bulk transforming plant in the Radvanj suburb of Maribor transmits 80,000 volts. In 1937 Maribor consumed 24,490,000 kw. hours. The Maribor region has altogether 56 transformer stations with 74 transformers. 615/

c) Water system. The system built in 1901 was enlarged and improved in 1934-1936. There were 15,720 cubic yards of water available daily. New expansion was planned in 1939. 616/

d) The sewer system is fairly good. Sewage empties into the Drava river.

Industry. As a center of a rich agricultural area Maribor has an important trade in agricultural products and wine. The area around Maribor has many vineyards, which produce excellent wine.

Industry is well developed both in Maribor and in its suburbs -- Studenci, Tezno, Lajtershperg. A number of the larger factories, within a radius of 40 miles, are listed below: 617/

Fala Electric Power Plant is located at Fala about 8 miles west, on the Drava. The plant has five turbines generating 6,000 h.p. and two turbines generating 10,000 h.p. a total of 50,000 h.p. The power of the generators is 11,000 volts. This power plant supplies Maribor, Lashko, Ptuj, Ormozh, Chakovec and many other Slovene cities and industries In 1937 it supplied 175,505,833 kw hours of power.

Doktor and Co.textile factory had 23,000 spindles, and employed about 1,200 workers. The factory had freed Yugoslavia to a considerable extent from the necessity of importing certain types of materials.

August Ehrlich textile factory produced 1.1 million yards of various kinds of goods and almost twice as many lbs. of cotton yarn and thread. It employed about 800 workers.

"Favorit" textile factory is another large textile firm, which claimed that in a few years it would be able to satisfy all domestic needs.

J. Huter textile factory consumed annually around 6 million lbs. of cotton, and employed on the average 1,500 workers.

Maribor Textile Factory employed about 450 workers and produced many kinds of textile goods.

Maribor Silk Factory produced annually around 660,000 yards of silk materials. It is located at Radvanje, 1.5 miles SW of Maribor.

Rosner Marko textile factory employed around 1,000 workers.

A textile factory at Koshaki, 1.5 milesNE of Maribor, employed around 130 workers and had 52 textile machines, producing many different kinds of dry goods.

Thoma & Co. produced annually around 2.2 million yards of all types of goods, and employed around 550 workers. The specialty of this firm is silk goods.

"Zora" Company produced clothes and textiles, and consumed annually about 40,000 lbs. of thread. It employed 90 workers.

"Vunatek" woolen textile factory, at Majshperk (14 miles S by E of Maribor), has modern machinery and employed 150 workers.

Anton Pinter factory produced all sorts of spindles and other gadgets necessary for the textile industry. This factor which has 2,616 cu. yards of enclosed space, is equipped with modern machinery.

Nitrogen Manufacturing Company, Rushe (5 miles W by S of Maribor), produced calcium carbide (annual capacity, 20,000 tons), cyanamide (annual capacity, 34,000 tons), and nitrates. It has equipment for liquefying air. Nitrogen is obtained by fractional distillation.

Mara Refinery, Maribor, had a capacity of 1,000 tons of vaseline and similar oil products (apparently per annum).

"Unio" factory, for chemical products, employed 80 workers. It manufactured paraffin products and candles.

E. Pogachnik Company at Brezno on the Drava (16 miles W of Maribor), had a water turbine of 510 h.p., and produced wood products, wood glue and paper materials. It employed around 120 workers.

"Pinus" factory for glues of all sorts, at Rache (7 miles S of Maribor), produced for the domestic market.

The tannin factory at Majshperk (14 miles S by E of Maribor) produced annually 5.5 million lbs. of pure tannin extract. It had a 50 h.p. motor, as well as a 2.2 mi. coble car over the mountains, which connected with a 5.6 mi. normal gauge line leading to Pragersko. The factory employed around 120 workers and formerly exported 80 per cent of its product, primarily to Hungary, Rumania, Poland, Holland, Germany and Scandinavia.

Freund Viljem factory produced all kinds of leather and fur products. It consumed annually 120,000 calf and 48,000 cow hides. The factory employed over 100 workers.

Karel Wrentschur leather factory was operated by a Diesel motor of 120 h.p., and had a capacity of 500 light and 50 heavy hides, which were partly imported. The product was sold at home. About 30 workers were employed. The factory is located at Marenberg (24 miles W of Maribor).

(1320)

L. Laurich factory for leather goods, at Slovenske Konjice (19 miles SSW of Maribor) was operated by three motors with a total of 450 h.p., and employed 150 workers.

Franc Ks. Pototschnig factory produced all kinds of leather products. The factory is of considerable size, but its products are for the most part consumed at home.

Benko Josip slaughter house, at Morska Sobota (25 miles NE of Maribor) exported meat products to Austria, Germany, Italy and Czechoslovakia, and had branches at Maribor, Celje, Gornja Radgona. The slaughter house employed 80 workers and the branch slaughter houses 30 each.

The Maribor slaughter house is city owned. In 1937 it had a modern compressor of 108,000 calories per hour. In that year 5,800 head of livestock, 10,000 pigs, and many smaller animals were slaughtered.

Sladkogorska paper factory, at Sladki Vrh (9 miles N of Maribor), was operated by three turbines, three steam and Diesel machines with a total capacity of 1,500 h.p. It produced cellulose, paper, etc. and employed 250 workers. It had a capacity of 2,710 tons of paper and glue per annum, in 1931.

Mikolich Ivan factory at Slovenj Gradec (29 miles W by S of Maribor), employed about 170 workers and produced all kinds of school and office materials.

"Kovina" metallurgical plant received part of its raw materials from abroad. It produced annually about $40,000 worth of cables and smaller metal products and sold practically all of it at home. The firm employed 150 workers.

The Construction Company, at Tezno (1.5 mile S of Maribor produced annually 2,800 tons of structural iron and steel, and employed around 300 workers.

Vesna-akumulator company produced annually between 60 to 70,000 accumulator plates or 1,000 accumulator batteries of medium capacity.

A. Pogachik iron works, at Rushe (5 miles W by S of Maribor), produced light iron products.

Henrik Kieffer factory produced scythes and similar products. Daily capacity of about 4,000 pieces. Raw material was received mostly from Sweden, and finished goods were exported to Poland, Rumania and overseas. The firm employed 130 workers, and it is located at Sv. Lorenc on Pohorje (12 miles W of Maribor).

Koelner factory at Slovenj Gradec (29 miles W by S of Maribor) produced 400 scythes daily and employed around 40 workers. It exported its products to Turkey, Rumania, Poland, Asia Minor, etc.

Zugmayer & Gruber, factory for copper and bronze products at Slovenska Bistrica (12 miles S of Maribor), employed around 200 workers. It produces copper wire, pipe and sheeting for locomotives and for the electrical industry. The copper was obtained from the Bor Copper Mines.

(1320)

The Styrian Iron Works, at Zreche (19 miles S by W of Maribor), operated with a 200 h.p. motor and employed around 180 workers. It produced mostly small iron agricultural tools.

The Count Juri Thurn Steel Works, at Ravne-Gushtanj (33 miles W of Maribor), produced many important steel products, including military equipment. The firm exported its products to the Near and Far East. It had about 400 steady workers.

About 40 miles east of Maribor are the Mezhice lead mines, formerly exploited by the Central European Mines Limited. Four ores were most extensively and profitably mined: galenit (PbS), sfalerit (ZnS), wulfenit ($PbMoO_4$), and kalamin ($ZnCO_3$). The work in the mines was done practically exclusively by machines. Material was transported with electric locomotives. Total length of electrified lines was 12.4 mi. Capacity in 1939 was 374 tons of ore per 8 hours. Annual production amounted to about 99,000 tons of lead ore. Normal annual production of lead was around 11,000 tons. Products were sold primarily at home. The industry employed around 800 workers. There were quarters for the workers as well as a hospital.

The Opekarna Lajtershperg brick factory, at Koshaki (1.5 miles NE of Maribor), employed over 200 workers and produced annually over 5 million bricks of various types. It consumed annually over 150 cars of raw materials.

"Aga-Rushe" factory, at Rushe (5 miles W by S of Maribor), produced acetylene and oxygen. Specific figures regarding its output are lacking, but this factory is important and has probably been improved by the Germans.

Clotar Bouvier firm produced high quality wines and exported them to Germany, England, Switzerland, Poland and Egyp

Ruetgers Gvido factory for the impregnation of wood, at Hoche (3 miles S of Maribor), employed 60 workers. It produced for telephone, telegraph, railway and other needs. Practically all of the output was sold at home.

Peter Magerl lumber industry, Poljchane (17 miles S of Maribor), has three steam motors. Capacity was about 430 freight cars of wood products annually. It employs 180 workers.

Tovarna dezhnikov at Dolnja Lendava (37 miles E of Maribor), produced annually 150,000 parasols and umbrellas, and many other products. Electric power was from the plant in Lendava.

The largest railroad workshop in Yugoslavia and a Junkers airplane factory are also in the Maribor industrial area. 618/

Supplies. In normal times there is plenty of food in the Maribor area. Water is plentiful. There is also enough fodder.

textile

Normally the industries supply far more material than is needed in Maribor region.

Wood and coal can be obtained in sufficient quantities.

(1320)

There is an adequate amount of construction materials. Lighter machinery and tools can be obtained in sufficient quantities. There are at least four construction firms, which have their own machinery and storage yards: 619/

Jelenc & Shlajmer employ steadily four to five engineers and between 400 to 500 workers. This firm built all types of iron and concrete buildings.

Ubald Nassimbeni construction company, dealt with cement and stone works. It also built highways. The firm employed around 300 workers.

Anton Romih firm specialized in construction of modern buildings.

The Tezno Construction Company built railway and other bridges, water and electric installations, buildings, etc. Normal annual capacity amounted to 2,500 tons of iron constructions. Employed about 300 workers.

Highway Connections. Main highways from Belgrade, Zagreb and Ljubljana converge on Maribor. There are highway connections with Graz (Germany), Klagenfurt (Germany), Villach (Germany) and Tarvizio (Italy). Most of the Slovenian roads are in good condition -- much has been done in recent years in improving and building modern roads in that area. Distances between Maribor and some of the important centers are as follows: 620/

Maribor - Belgrade, 296 miles

Maribor - Zagreb: there are two routes, one via Slovenske Bistrice (79 miles), and another via Ptuj and Varazhdin (76 miles).

Maribor - Ljubljana, 86 miles

Maribor - Klagenfurt, 78 miles.

Transportation. Maribor had a city-owned autobus system, which used 21 buses for urban and interurban transportation. 621/ In 1935 Maribor had eight garages, including a municipal garage and repair shop, but some of these are probably very small. Fifteen firms sold automobile parts and tires, and seven firms repaired automobiles. 622/

Maribor had bus connections with following cities: 623/ Sv. Lenart - Sv. Trojica; Zg. Cmurek; Sht. Ilj - former Yugoslav border; Sv. Petar; Selnica; Rushe; Studenci, Pobrezje, Koshaki; Sv. Martin; Hoche - Reka; Celje, (39 miles).

Railways. Maribor is one of the more important railway junctions on the Vienna - Ljubljana - Rakek (130 miles) - Trieste line. An important line connects Maribor with Bleiburg (Germany -- about 53 miles), and Klagenfurt (Germany), which at Dravograd connects with the Celje - Lavamind (Germany) line.

There are three railway stations: one on the Maribor - Bleiburg line; another at Tezno on the Vienna-Trieste line, south of the Drava; and the main station, north of the Drava. 624/

(1320)

The largest Yugoslav railway workshop was located at Maribor. It employed the greatest number of workers, but lacked modern machinery. 625/

Air Transportation. Maribor had an aerodrome which was owned by the Yugoslav Aero-club "Nasha Krila". It was located 1.5 mi. S of Maribor. Coordinates are 46° 34' N., and 15° 39' E.; elevation 899 ft. The size of the aerodrome is 2,953 x 1,968 feet and it had a hanger and repair facilities. 626/

At Tezno (south of Maribor) a Junkers aeroplane factory was reported. 627/

Communications. Telegraph and telephone connections are good. There is no broadcasting or radio telegraph statio Maribor had three post offices. In 1938 they handled a total of 9,520,086 pieces of mail, 41,292 telegrams, and 3,844,072 telephone calls. 628/

Health and Sanitation. Between 1934 and 1937, 344 persons died from tuberculosis, or 12.94 per cent of the total deaths. 629/ There was one large hospital with 606 beds, which was served by 19 doctors, and had a technical staff of 125. 630/ There was also a military hospital. Surrounding cities probably had small hospitals of their own.

Municipal Government. Maribor was a county seat. County Director (nachelnik) and county administrative departments, regional and county courts, and gendarmerie and police departments were located there. At the head of the municipal government was the Mayor, who governed with the help of an elected council. (See attached diagram of municipal governmen The city is now under German rule.

Newspapers. In 1934-35 at least two daily papers were published in Maribor: Mariborer Zeitung, and Mariborski Vechernjik-Jutra (Maribor Evening-Morning Paper), both of local importance. There were in addition four weekly papers: Delavska Politika (Workers' Politics); Slovenski Gospodar (Slovene Economist); Volksstimme; Razglod (review). 631/

Military Considerations. There are four groups of barracks, a military hospital, and camping facilities are available. Headquarters of the Maribor Army Area. Army Engineering school 632/

An aeroplane factory is reported at Tezno, near Maribor.

Due to its large size, the following document has been filmed in segments. The order of the segments is as follows: left to right, top to bottom.

TOWN PLAN OF MARIBOR

AS OF OCTOBER, 1935

LEGEND

- RAILROAD
- RAILROAD AREA
- MAIN ROAD
- TRANSPORTATION BOTTLENECK
- PUBLIC BUILDING
- MILITARY BUILDING
- AREA OF MILITARY IMPORTANCE
- INDUSTRIAL AREA
- POTENTIAL OPEN STORAGE AREA

1. VOJVODE MISICA BARRACKS
2. CITY HOSPITAL
3. CITY ADMINISTRATION BUILDING
4. POST OFFICE
5. CENTRAL RAILROAD STATION
6. CITY COURT
7. CITY BATH
8. CITY ADMINISTRATION BUILDING
9. KING ALEXANDER BARRACKS
10. KOROSKI KOZOVDOR R.R. STATION
11. CITY HOSPITAL
12. TESNO RAILROAD STATION

SCALE NOT KNOWN

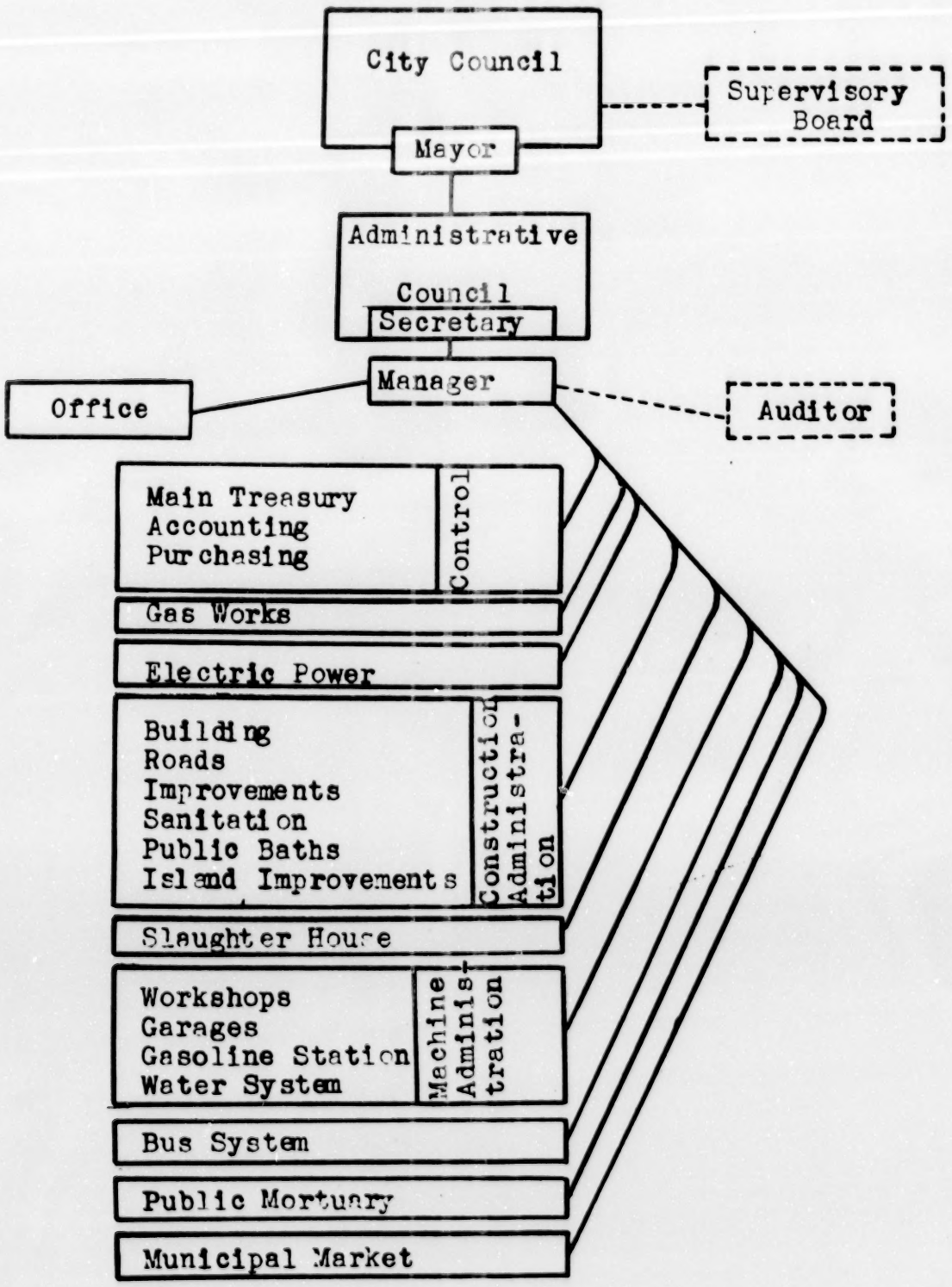
ul., ulice - street
cesta - boulevard

Reliability Code 2B--2B--2

MAP NO. 2776
22 NOVEMBER 1943

COMPILED AND DRAWN IN THE BRANCH OF RESEARCH AND ANALYSIS, OSS
LITHOGRAPHED IN THE REPRODUCTION BRANCH, OSS

MARIBOR CITY GOVERNMENT



9. Nish

Importance. Nish, the capital city of the former Moravska Banovina, is a vital transportation center. It has industrial and commercial significance. It was the see of an Orthodox bishop, and the headquarters of a military district. 633/

Location. The city is in central Serbia on the Nishava river, a short distance east of the Morava river. Its coordinates are 43° 19' N., 21° 54' E. Elevation is 650 feet. 634/

Description of City. Nish, a typical provincial town, experienced rapid growth in the twenty years ending in 1941. It is situated in a hollow between vine-covered hillsides, with hills on all sides. In the center were fine modern buildings and wide, well-paved streets. The older parts of the city had cobbled streets and small, one-story oriental houses. 634a/ There is a large Orthodox cathedral, and on the right bank of the river, an old square stone citadel, adjoining the crowded Turkish quarter. 635/

Climate. Average annual temperature 52.7° F; atmospheri pressure 7.45 millibars; temperature range 104.7° F. to -9.4° F; humidity 75. There are 95 rainy, 20 snowy, 35 stormy and 150 foggy days. Precipitation is 20.1 inches. 636/

Population. According to the census of 1931, there were 35,465 inhabitants, of whom 30,214 were Orthodox, 2,422 were Catholics, and 2,356 Moslems. 637/ The population is mostly Serbian, and Nish is a stronghold of Serbian national feeling. 638/

The occupational division of the working population in 1931 was as follows: 639/

Agriculture, forestry and fishing	273
Industry and handicrafts	7,638
Commerce and Communications	2,594
Government, liberal professions and Army	4,920
Others	3,384
Total active population	18,809

The greatest increase has been in the industrial bracket and the total population figure has probably reached 40,000.

Utilities. A water system supplies parts of the city by means of public taps. 640/ Probably in the modern parts of the city many of the buildings have water piped in. There is an electric street railway, and a hydro-electric power plant. 641/ There is no information available concerning sewage disposal.

Industry. The Yugoslav Tobacco Monopoly had one of the largest factories at Nish, which in 1928 produced 838,773,000 cigarettes, 4,100,000 lbs. of tobacco, and 13,545,000 cigars. 642/ There was a rubber products factory and a cotton cloth mill. 643/ Other factories produced furniture, ice, leather and leather goods, sacks, knit goods, brick (4 factories), chemicals, small machine part and metal articles, and castings. 644/ The Nishavac Beer Co., produced annually about 528,000 gallons of beer (1931). 64

(1320)

Supplies. Many foodstuffs are available. Grain, walnuts, cheese, sheep and goats are among the chief local products. 646/ Tobacco is plentiful. Most manufactures must be imported. Coal is mined about 37 miles to the east, and at several places northeast. 647/

Highway Connections. Nish is an important junction on the international highway between Belgrade (163.4 mi.), and Sofia (138.6 mi.). Another road leads up the Morava valley to Skoplje (125 mi.) and Bitolj. 648/ Secondary roads lead west to Prokuplje, and northeast to Svrljig, (25 mi.), Knjazhevac and Zajechar (68 mi.).

Local Transportation. Nish has a street railway, 7.5 mi. in length, with 11 cars (1938). In that year it carried 1,462,526 passengers. 649/ A bus line ran to Nishka Banja, a watering place 6.2 mi. to the east. 650/ In ordinary times horses and automobiles were probably available.

Railways. Nish is the most important railway junction of Southern Serbia. The main line from Belgrade (154 mi.) splits into the trunk line to Sofia (100.7 mi.) and Constantinople (travelled by the Orient Express and the Simplon-Orient Express); and the southern trunk line up the valley of the Morava to Skoplje (129 mi.) and Salonika. 651/ A secondary line runs NE from Nish via Knjazhevac and Zajechar (70 mi.), near the Bor copper mines, to Prahovo on the Danube. 652/ There are railway repair facilities and a roundhouse.

Air transportation. During the summer there was one plane in each direction daily over the Belgrade-Nish-Skoplje line. The military and civil airfield was at Medoshevac, 1.9 miles NW of Nish at an elevation of 682 feet. It was 3,690 by 3,600 feet, and had hangar facilities. Its coordinates are 43° 19' N., 21° 54' E. 653/

Communications. Because of its importance as a transportation center, Nish has good trunkline, telegraph and telephone connections. There was no radio telegraph nor radio broadcasting in 1938.

Health and Sanitation. There are military hospitals outside the city, and at Nishka Banja, 6.2 mi. E., where there are radioactive springs and a sanatorium. The government hospital had 254 beds, 11 doctors and a technical staff of 60 in 1937. 654/ In 1938, 10,320 examinations for malaria were made in the local institute of hygiene. 655/ During the years 1934-37, 423, or 19.1 per cent of all deaths, were caused by pulmonary tuberculosis. 656/

Municipal Government. Before the war, Nish was the cente of Moravska Banovina and was also a county seat. It is now the headquarters of the Bulgarian occupation forces. Nish is now in the state of Serbia. The civil government of the city is probably controlled by a military "Commandant."

Newspapers. Prior to German invasion Nish had at least three newspapers: Glasnik (The Herald), Nishke Novine (Nish News), and Nishki Novi List (Nish New Paper).

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Military Considerations.

1. Very important railway junction for Belgrade-Sofia, Belgrade-Salonika, and Nish-Zajechar-Prahovo (Danube) lines. During the first World War Russia supplied Serbia by way of the latter line.

2. Junction of highways from Belgrade, Sofia and Greece.

3. Dominated the Nishava valley and the southern Morava valley. Bulgarian troops reported stationed there.

4. Under normal conditions food plentiful. Large army units have always been quartered there.

10. Novi Sad (Neusatz, Ujvidek)

Importance. Novi Sad, sixth largest city of Yugoslavia, is the chief city of Vojvodina province and before the war was capital of the Dunavska banovina. It is a railway center and a river port, and is the center of a rich farming region. It has considerable light manufacturing. The city is now under Hungarian rule and is called Ujvidek.

Location. Novi Sad is on the north (left) bank of the Danube about 50 miles northwest of Belgrade, at 45° 16' N., 19° 50' E. 657/ The city lies about half way between the junctions of the Drava and the Danube, and the Tisza and the Danube. Its altitude is 262 ft. 658/ The surrounding country is generally quite level. A few miles to the south, however, lies the Frushka Gora, a range of forested hills rising in one place to 1,763 ft. 659/

Novi Sad lies west of a northward bend in the Danube. On the peninsula formed by the bend are the high stone walls of a huge, well preserved medieval fortress system which covers an area 1 mile long (N - S) and 0.4 miles wide. The fort is built on a low hill, 120 ft. higher than the city, and is visible for miles. Immediately E of it, also on the peninsula, is the town of Petrovaradin. A high, 1,410 ft. railroad bridge crosses from Novi Sad to Petrovaradin, passing through a tunnel under the fort, and 0.3 miles N of it is a 1,093 ft. highway bridge. Inside the fort walls are large army barracks and army administrative buildings.

North of the Petrovaradin peninsula and E of Novi Sad is a swampy overflow basin 4.3 mi. long (E - W) and 2.5 mi. wide (N - S), which is completely inundated during flood time. Both the city and the basin are surrounded by dykes. Between this area and the city begins the King Alexander barge canal to Sombor, which forms Novi Sad's NE and N boundaries. (See accompanying map). 660/

Description of city. Novi Sad is a flourishing industri and commercial town. There are a number of new 4 and 5-story buildings in the center of the city. The main street is the Boulevard Kraljica Marija. The most important buildings are the city hall, with a high tower, the palace of the bishop, the Orthodox cathedral, the chamber of commerce, and three large school buildings. There was a gymnasium for boys and one for girls, girls' teachers college, commercial academy and opera and theatre. 661/ The city had 8,540 residential buildings in 1931. 662/

Climate. The mean annual temperature has averaged 52.5° F. while the mean temperature in January was 30.5° F. and in July 73.2° F. The temperature range is about 110°. Atmospheric pressure generally averages 750.6 millibars and annual precipitation averages about 24 inches. There are on the average 110 days of rain, 30 snowy, 22 stormy and 94 foggy days a year. Prevailing winds are NE and W. 663/

Population. The population in March, 1931, was 63,985 [illegible] The population doubled between 1910 and 1931, and by 1941 it had probably risen close to 70,000. Magyar persecutions of the Serbs have been reported -- which may have caused many Serbs to flee from the city.

(1320)

According to an investigation made in 1921,, of the 39,000 inhabitants of Novi Sad and the vicinity, the Serbo-Croat langauge was the mother tongue of 17,211, Magyar was the langauge of 10,343, and 6,479 were German-speaking. This proportion has now increased to about 3: 2 or better in favo of Serbo-Croatian as against the combined Hungarian-German population.

The religious distribution in 1931 was: 665/

Orthodox	24,829
Roman Catholic	27,352
Protestant	6,881
Other Christian	1,259
Moslem	516
Jews and Others	3,148
Total	63,985

The occupational division of the 35,259 working population in 1931 was as follows: 666/

Agriculture, forestry, fishing	5,902
Industry and trades	10,807
Commerce and Communications	6,443
Government, army, liberal professions	7,851
Others	4,256
Total	35,259

Utilities. In 1934/there was a municipally-owned combined gas and coke works, 4 ice plants and a municipal water works 667/.

The American-owned Navisad Electric Company operated a 5,000 kw. steam plant which served the Beochin cement factory, 11 miles SW, and 13 villages in addition to Novi Sad. Of the total of 25,661,900 kw. h. generated in 1940, about one-fifth was used industrially (excluding Beochin). There is a 30,000-volt, 2-circuit (6 wire) transmission line between Novi Sad and Beochin and a smaller 30,000-volt line to Zhabalj. 668/

Industry. Novi Sad has considerable light industry. There are several food-processing plants, including 4 flour-mills; one fish cannery and one for meat, fruit, and vegetables ("Kuplin Co.", capital $100,000); a meat-packing plant; a dairy-products factory, and confectionary establishments and bakeries. Many wooden articles are made, including barrels, wagons and carriages, furniture, flooring, baskets, and packing-cases, as well as building lumber. Alcohol, wine, brandy, and champagne are also produced. Leather and some leather goods, and a large variety of textiles such as cotton, silk, and knit goods, sacking hosiery, and men's clothing are manufactured. Stone is quarried and brick and pottery are made. Glass, dyes and paints, glycerine, coal tar, soda, soap ("Albus" factory, capacity 2,200 tons a year) and other chemicals are produced. A number of metal works produce light metal roducts including tools, locks, pipes, bicycles, stoves, tinware, meat machinery, milling machines, and farm machinery. There is a small radiator factory. Electrical household appliances, motors, copper pipe, wire and cables are also made. The largest foundry employs 300 workers. 669/ The Ikarus factory builds aeroplanes;

this has probably been modernized and enlarged by the Magyars or Germans. 670/

Supplies. Novi Sad has developed into a center for the export of grain, oil seeds, beans, leather, livestock, poultry, eggs, wine, liquor, fruit, and vegetables, as well as wood and wooden articles, all of which are being produced locally in increasing quantities. Truck gardening is particularly well developed. 671/

Highway Connections. Novi Sad is on the international highway between western Europe and Istanbul. It is 48.4 miles northwest of Belgrade, and 65.8 miles south of Subotica. 672/ A short distance north of Novi Sad a road branches off to Petrovgrad (Veliki Bechkerek), 31.7 mi. to the east. South of Novi Sad a road runs through the Frushka Gora hills 19.2 mi. to Ruma, whence roads branch off to the west, south and east. 673/

There is a steel and concrete vehicular bridge, 262 ft. long, over the King Alexander Canal at the N side of Novi Sad on the highway to Subotica, 674/ and a 1,093 ft. bridge over the Danube between Novi Sad and Petrovaradin. 675/

Local Transportation. In 1937 there was a bus line from Novi Sad southward to Ruma (19.2 mi.) 676/ Information concerning other interurban transportation facilities is lacking. There is a street car line in the city, with 4.3 mi. of track and 14 cars. 4,908,654 passengers were carried in 1938 677/

Railways. Novi Sad, an important junction, is on the trunk line from Belgrade to Budapest. It is 47.2 mi. by rail from Belgrade and 63.3 mi. south of Subotica. It also is connected with the main east-west line at Indjija, 21.1 mi. southeast of Novi Sad, on the line to Belgrade. Novi Sad is center of a network of local lines to the east and west: to Beochin (14.3 mi. W); to Sombor (57.1 mi. NW); to Horgosh (86.3 mi. N via Rimski Shanchevi, 7.4 mi. E); and to Titel (52.2 mi. E via Rimski Shanchevi), and other branch lines. 678/

There are extensive marshalling yards and repair facilities in the main station area at the south side of the city. A large 1,410 ft. three-span steel railway bridge crosses the Danube from Novi Sad to Petrovaradin. 679/

Water Transportation. Novi Sad, situated on the Danube, is one of the largest river ports in Yugoslavia. In 1938, 102,054 tons were unloaded and 21,906 tons were loaded, in addition to 38,059 tons of foreign imports and 10,331 tons of foreign exports. Rafts containing 331,069 cu. ft. of timber arrived at Novi Sad in 1938. In the same year 197,283 passengers arrived at Novi Sad by boat and 195,031 departed. 680/

Novi Sad is the terminus of the King Alexander Canal, which runs 42.3 mi. north, linking the Danube to the King Peter Canal. The latter in turn links the Danube and the Tisza. In 1936 this canal system carried 5,660 tons of freight For port facilities, see Appendix B, Principal River Ports. 681/

Communications. Novi Sad was the headquarters of one of the administrative districts of the Yugoslav Ministry of Posts, Telegraphs and Telephones, and thus had telegraph and telephone connections with all parts of the Kingdom. There were, however, no radio telephaph nor broadcasting facilities. There were 41,204 receiving sets in the Novi Sad postal district in 1938. 682/

Health. Malaria, formerly prevalent, has been greatly reduced. The city gave 1,886 malaria examinations in 1938. Marshes in the Danube overflow basin are being cleaned up. 683/

The state hospital had 17 doctors, 464 beds, and a technical staff of 72 in 1937. 684/ As one of the most prosperous towns in Yugoslavia, hygienic conditions are good and private hospitals are numerous. There is a large military hospital across the river at Petrovaradin. Deaths from pulmonary tuberculosis during the years 1933-1937 totalled 396, or 11.11 per cent of all deaths in this period. 685/

Newspapers. In 1934-35 there were at least three newspapers in Novi Sad: Buduchnost (Future); Novi Sad; and Pokret (Movement). These may have disappeared under Hungarian rule.

Municipal Government. Novi Sad was an autonomous, or "free" city. It had its own city senate, which exercised legislative functions. In all financial matters it was autonomous and its budget was not subjected to supervision by the Ministry of Finance. Novi Sad was a county seat, as well as the capital of the Dunavska Banovina. It had many national and local administrative offices. City administration was directly under the Ministry of Interior as was the county nachelnik (Director). The city was governed by a elected mayor. 686/

Military Considerations.

1. A large number of Magyars and Germans live in Novi Sad.

2. Controls the Danube shipping. Terminus of King Alexander Canal.

3. On the main Budapest-Belgrade railway line, and has large railway facilities.

4. Has an aeroplane factory, "Ikarus".

5. Important highways converge at Novi Sad from all directions.

6. Considerable chetnik activity reported on Frushka Gora, mountains just south of Novi Sad.

11. Osijek (Essegg)

Significance. The largest city in Slavonia, Osijek is an important railway junction and port and a growing industrial and commercial city. It is also the cultural center of Slavonia.

Location. On a large plain on the right bank of the Drava about 35 km. south of the old Hungarian border and 12 miles above and west of the confluence of the Drava and the Danube. Coordinates are 45° 34' N. and 18° 42' E. Elevation 303 feet.

Description. Osijek, one of the oldest cities in Europe is situated on the south bank of the Drava. The old or "Inner City" is surrounded by a 1,000 foot park belt. West of it is the Upper Town, east is the Lower Town, and south beyond the railroad is the New Town. The city stretches along the river for 3½ miles and is about one mile wide (See accompanying map).

The Upper Town is the center of trade. On its northern side , on the Drava, is the winter anchorage for some 60 river craft. On its south side is the main railway station (a second station is south of the Lower Town). The Playhouse, a single-spired Gothic cathedral and a large hotel (Grand Hotel) are located in the Upper Town, as well as many financial, commercial and industrial institutions, the chamber of commerce, commercial academy (school), "Drava" match factor "Union" steam flour mill, the gas works, a brewery, and the "Tvorum" Glass Factory. This section has fine buildings and streets.

The Inner Town is primarily historical. The largest buildings are the "General Jankovich" barracks on the Kerageorge Square. Other buildings include three gymnasia, a girls' trade school, the city museum and the old fortress. In the open space in front of the two bridges over the Drava (railway and vehicular), an electric power plant was under construction in 1927. The plant was to supply the street car system, city lighting and industry.

In the Lower Town between the landing stage and the railroad bridge are the "Ban Jelachich" barracks, a machine factory and an iron foundry. Here also are located the silk factory, the state hospital, the "King Peter" artillery barracks, the Osijek flour mill, teachers' college and sugar, alcohol, biscuit and leather factories and the Schicht soap works.

The main features of the New Town are a primary school, and factories for bricks, hemp and linen. All but the old town have wide straight streets. 687

Climate. The climate is comparable to that of Novi Sad. The hottest month is July (average temperature around 75° F); the coldest month is January (average temperature around 30°F). Rainfall is considerable. The city is exposed to NE winds.

(1320)

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Population. In 1931 Osijek had 40,337 inhabitants, and was the ninth largest city in Yugoslavia. The occupational division of the 21,709 employed population was as follows: 688

Agriculture, forestry, fishing	1,067
Industry and trades	9,027
Commerce and communications	3,680
Government, army, liberal professions	3,828
Others	4,107

The religious distribution in 1931 was: 689/

Orthodox	5,884
Roman Catholic	30,330
Protestant	1,049
Other Christian	177
Moslem	437
Others	2,460
Total	40,337

As can be seen, therefore, Osijek was preponderantly a Catholic city.

The ethnic distribution in 1921 was : 690/

Croats and Serbs	20,650	(about 6,000 Serbs)
Slovenes	654	
Other Slavs	962	
Germans	9,870	
Magyars	2,101	
Others	175	
Total	34,412	

. In 1928 more than one fourth of the population was said to be German. 691/

Utilities. Osijek had an electric power plant, gas works, and a water system. Information regarding the capacities of these utilities is lacking. The sewage system is adequate. 692/

Industry. Main industries are foods, wood products, leather, and metal works. Other local products are lumber, glassware, paper, matches, chemicals, textiles, clothing, soap, printed matter, construction materials and ceramics. Most important among the food industries are the sugar factory with a capacity of 15-20,000 tons a year, and the flour mills. 693/

The largest metal works was the Osijek foundry and machine shop with a working capital of $300,000. The largest lumber mill, Normanci, operated with $100,000 capital in 1930. The Schicht soap factory had an annual production of 5,500 tons, a comb factory produced 300,000 pieces, and two dye works 2,420 tons yearly. 694/ Other industries included a slaughter house, a glue factory and a distillery. 695/There was a small Yugoslav owned oil refinery with an annual capacity of 16,500 tons in 1938, which had rather

antiquated equipment. 696/

Supplies. The neighborhood furnishes most of the raw materials needed for a large city. Hence the large industrial development of recent years. In normal times food is plentiful. West and south of the city is the huge forest which supplies the world-famous Slavonian oak. 697/

Wood for fuel comes by water; some coal and considerable oil was imported (1936). The Shell oil company had storage facilities for 33.6 tons and the Ipoil refinery had tanks with a capacity of 8,960 tons. 698/

Highways. Osijek is on the international route Budapest (157 mi.) -- Belgrade(111 mi.) -- Sofia. Other first class highways lead west to Zagreb (172 mi.) via Nashice (31 mi.) and Pakrac, and south to Doboj via Djakovo (23.6 mi.) and Slavonski Brod. From Josipovac, 5 miles west of Osijek, an alternate route parallels the right bank of the Drava to Slatina. A first class road also connects Osijek with Vinkovci and with Vukovar on the Osijek -- Belgrade trunk route. 699/

Local Transportation. There are several street car lines connecting the steamer and railway stations with the rest of the town. The total network is 6.8 miles. There were ten electric cars and 6 trailers with 800 seats in 1938, and 3,369,228 passengers were transported. 700/

Railways. Five railway lines converge on Osijek. One connects it at Dalj (15.5 miles) with the Vinkovci - Sombor - Subotica line. Via the latter there are direct connections with Budapest and Vienna. An alternate route north is via Beli Monastir (15.5 miles, former frontier station) and Pech. There are three connections with the Belgrade - Zagreb trunk line: at Vinkovci, Strizhivoina - Vrpolje, and Nova Kapela-Batrina via Nashice.

The large main station to which all lines come is on the southern side of the Upper Town. A subsidiary station on the Dalj line is located in the Lower Town about 2½ miles east of the main station. There is a station at Retfala, less than 2 miles west of the main station, on a narrow gauge (1m. or 3.28 feet) private line which parallels the Nashice line to Josipovac and then continues up the right bank of the Drava to Noskovci (114.5 miles).

The line to Beli Monastir - Pech crosses the Drava over a bridge located just east of the highway bridge. 701/

Aviation. One of the principal Yugoslav civil airdromes was located west of the city at 45° 32' N., 18° 43' E., with hangar and repair facilities.

River Transportation. Osijek is one of the more important inland ports, located on the Drava but only about a dozen miles from the Danube. There are two ports at the Upper and Lower Towns. The former is used for local cargo and passengers and affords winter anchorage for 60 vessels. All

foreign traffic is handled at the Lower Town port.

In 1936 there were 1,274 ship arrivals and the same number of departures. Total cargo turnover was 87,850 tons, placing Osijek in 13th place out of 125 inland ports, or 3rd in imports and 21st in exports. The most important commodities handled were petroleum (28,220 tons, mostly imported), wood for fuel (6,690 tons), lumber (6,160 tons), wheat (9,320 tons, more than half exported) and corn (9,220 tons, mostly exported). 702/

For port facilities, see Appendix B, "Principal River Ports".

Communications. Osijek formed a part of the general Yugoslav telephone and telegraph systems, with headquarters in Zagreb. In 1938 there were one main and four branch post, telegraph and telephone offices which in addition to mail, handled 37,509 telegraph and 4,566,705 telephone messages. 703/

Health. The percentage of deaths from pulmonary tuberculosis during 1934-37 was 10.47, a relatively low figure. 704/ There is a state hospital, which had in 1935, 21 doctors and a technical staff of 121. 705/

Government. Osijek was formerly part of the Savska Banovina and in 1939 was included in the autonomous Croatian Banovina. Now it is in independent Croatia. Municipal government was as outlined in the main text.

Newspapers. In 1935, the two local dailies were Hrvatski List (Croatian Paper) and Jugoslovenska Zastava, (Yugoslav Banner). The local German paper was the weekly Christliche Volkszeitung, and there were three Yugoslav weeklies, Hrvatska Obrana (Croatian Defense), Osijechke Novosti (Osijek News), and Vjesnik za Prosvetu i Upravu, (Newspaper for Education and Government). 706/

Military Considerations. Osijek was the headquarters of a Yugoslav army division which included an infantry and an artillery batallion. The city garrison, the artillery barracks ("Kralj Petar") and the infantry barracks ("Ban Jelachich") were located in the industrial area between the Inner and Lower Towns. 707/

12. Sarajevo.

Importance. Sarajevo, 4th largest city in Yugoslavia, chief city of Bosnia, and formerly capital of Drinska Banovin is an important transportation, administrative, industrial, and religious center. It is an important military post as well.

Location. The city is located on the banks of the shallow Miljacka river, at the east end of a small plain, surrounded by high hills and mountains. Mount Trebevich, 4,500 feet in height, dominates the city. The city is hilly, with elevations from 1,762 to 2,297 feet; and lies at 43° 56' N., 18° 26' E. 708/

Description of City Sarajevo is one of the most oriental cities in Europe. The newer section is modern, with wide paved streets, while the hilly, older part of the city is Turkish, with narrow, winding street, gardens, bazaars and many mosques. 709/ The ancient citadel, west of the city on a height at the exit of the Miljacka gorge dominates the scene. There are wide boulevards along both banks of the Miljacka, which is crossed by 9 bridges. The main street of Sarajevo is the Kralja Aleksandrova ulica.

The important buildings include the railway station, 1.6 miles east of the center of the city, the military staff headquarters, large barracks, the state rug and tobacco factories, the Catholic and Orthodox cathedrals, many large government buildings including the imposing regional museum, and the famous Beg mosque, largest west of Adrianople. 710/ (See accompanying city plan and map).

Climate. The winters are often cold, and the summers quite hot. The average annual temperature between 1921 and 1931 was 49.5° F. In January, 1938 the mean temperatur was 28.8° F., and in July, 66.2° F. The precipitation averag from 1921 to 1931 was 32.8 inches, and the average barometr pressure was 27.85 inches. There were an average of 111 rainy, 39 snowy, 18 stormy and 43 foggy days a year between 1921 and 1931. Sarajevo is not a windy city, but east and southeast winds predominate. 711/

Population. The population numbered 78,173 in 1931. 712/ It was probably considerably larger by March, 1941. The 1931 census gave the religious composition of the population as 29,649 Moslems, 21,372 Catholics, 18,630 Orthodox, 7,637 Jews, and 885 others. 713/ Sarajevo is the cultural center of Moslem Yugoslavs and has about 100 mosques.

Although there is some industry, many of the people are engaged in commerce, the tourist trade, transportation and handicrafts. The occupational division of the 38,933 active working population in 1931 was as follows: 714/ agriculture and forestry --- 540, industry and trades --- 12,757; commerce and communications --- 6,758; government, liberal professions, army --- 11,721, others --- 7,157.

Utilities. There is a municipal power plant, and a gas works. 715/ No data are available concerning their size. There are sewer and water systems for the newer parts of the city. In 1934 there was one ice plant. 716/

Industry. Most of the Sarajevos' industries were small, and produced consumers goods. Larger enterprises included an airplane motor factory and two foundries (1934) as well as factories making scales and motor-driven saws. There was a mill, and a meat-products and a dairy-products factory. Several factories produced wine, liquor, and other beverages. 717/ The government tobacco factory in 1928 produced 1,078,353 cigarettes and 1,254,273 kg. of tobacco. 718/

In 1934 there were 14 saw mills, and factories producing barrels, airplane lumber, flooring, wagons, building lumber, furniture, railroad ties, boxes and the like. [719] The Butacioni and Denturini lumber firm annually exported about 14,000 cubic meters of wood. [720] Leather and leather goods, textiles and clothing, knit goods, bricks, cardboard, asphalt, dyes, roofing paper, brushes and umbrellas were among 1934 products. [721] There were also a large number of artisans producing wares for peasant consumption and for tourists.

The state rug factory with 14 branches employed 500 workers, mostly women, and produced large quantities of rugs and similar products. [722]

Supplies. As shown above foods are normally available, as well as clothing and other textiles. Lumber and lumber products are also to be had. Brick, stone, and asphalt are available. Most metal goods--especially large items--must be brought in. Considerable quantities of coal and iron are mined in the Sarajevo mining district, [723] Varesh, approximately 30 miles north of Sarajevo, has important foundries.

Highway Connections. Sarajevo is an important road center. Zagreb is 269 miles west, via Banja Luka, over a narrow and winding road although the grades are not dangerous. [724] Belgrade can be reached by several routes. The best, via Valjevo, is 211 miles. Mostar is 85 miles south of Sarajevo, with Dubrovnik 87 miles beyond Mostar. [725] This road leads through very mountainous country. Other roads go southwest to Split on the Adriatic, north to Tuzla, and east to Chachak.

Local transportation. In 1937 busses ran from Sarajevo to Jajce and Banja Luka (128 miles); from Sarajevo to Mostar and Dubrovnik (174 miles); and in the tourist season there was a bus from Sarajevo to Belgrade. [726] Sarajevo has a street railway system which traverses the main streets and serves the main railway station. In 1938 there were 3.7 miles of track, and 18 cars; 11,194,529 passengers were carried. [727] Automobiles and horse transport are available in normal times.

Railways. Sarajevo is the section headquarters for a network of narrow gauge railways (76 cm. or 29.9 inches). [728] One line runs to Belgrade (276 miles) via Uzhice, one north to Slavonski Brod (173 miles); one west to Jajce, and another south to Mostar and Dubrovnik (193.8 miles). There is a 6 mile local railway to the Ilidzha resort, which starts near the state tobacco factory, on the right (north) bank of the river. There are considerable repair facilities for narrow gauge rolling stock. [729]

Air Transportation. There is a civil and military airfield 6.8 miles west of the city, at an altitude of 1,634 feet (43°45' N., 36° 00' E.). In 1940 it was 3,770 x 3,525 feet. It had a hangar and repair facilities. Its radio signal was YTU. [730]

In 1939 during the summer season there was daily service in each direction over the line Belgrade - Sarajevo - Dubrovnik, and also over the Sarajevo - Zagreb - Vienna line. [731]

Communications. Sarajevo was headquarters of one of the administrative districts of the Ministry of Posts, Telegraphs, and Telephones. It had telegraph connections with all parts of Yugoslavia and with foreign countries, but did not have radio telegraph facilities. In 1938, there were 3,975 telephone subscribers. Six Sarajevo post offices handled in that year 12,996,247 pieces of mail, 117,149 telegrams, and 12,191,499 telephone calls. [732]

A broadcasting station was recently reported in Sarajevo on a wave length temporarily fixed at 276.2 m. (to be changed to 222.6 when reorganization is completed). It apparently broadcasts three times a day and is audible within a radius of 100 km. Its power is under 250 w. There were 6,496 radio receiving sets in the Sarajevo distri in 1938. [733]

Health and Sanitation. Little information is available. In 1938 the Drinska Banovina (of which Sarajevo was the capital), had the following record of infectious diseases: [734]

Typhus	252 cases	13 deaths
Typhoid and paratyphoid	523 "	49 "
Dysentery	98 "	7 "
Scarlatina	165 "	4 "
Diphtheria and croup	484 "	53 "
Meningitis	72 "	31 "
Erysipelas	201 "	7 "
Tetanus	30 "	15 "
Anthrax	52 "	2 "

Sarajevo had a military hospital. The state hospital had 38 doctors, a technical staff of 278 and 1,102 beds in 1937. [735] In the period 1934-1937 there were 757 deaths from tuberculosis, or 16.74 per cent of the total deaths during this period. [736]

Municipal government. Sarajevo was formerly capital of the Drinska Banovina, and of Sarajevo county. Head of the banovina was the ban, and of the county director (nachelnik), both appointed by the king. The municipal government was headed by the mayor, who governed jointly with the municipal council. Since the partition of Yugoslavia it has been part of Croatia and is governed from Zagreb. The local political scene is influenced by the Moslem element, the leaders of which usually support the party or government in power.

Newspapers. Principal ones were: Jugoslovenska Poshta (Yugoslav Post); Jugoslovenski list (Yugoslav Paper), Narod (People); Islamski Svijet (Islamic World); Jevrejski Glas (Jewish Voice); Katolichki Tjednik (Catholic Week); Novi Behar (New Bloom); and Slobodna Rijech (Free Speech). Some, or all of these may now have disappeared. In addition to these newspapers there were at least five periodicals.

Military Considerations. Sarajevo was the headquarters of the Yugoslav Second Army area. Considerable barracks and other military facilities are available.

13. Skoplje (Uskub)

Importance. Skoplje (Bulgarian: Skopie), chief city of Southern Serbia, is the transportation, industrial and administrative center of Vardarska Banovina. It was the see of a metropolitan of the Orthodox church, the headquarters of a military command, and had a university. 737/ Its position on the Vardar river dominates the main routes between Salonika and central Serbia. It is the 5th largest city in Yugoslavia.

Location. The city is located on both banks of the Vardar near the junction of several smaller rivers, including the Serava. It is surrounded by hills. To the north is the Crna Gora range. The altitude of the city is 787 ft.; its coordinates are 41° 59' N., 21° 26' E. 738/

Description of City. The old Turkish part on the right bank of the Vardar still retains its oriental characteristics: winding, narrow streets, overhanging houses, and about 40 mosques. 739/ On the western outskirts of the city is the Gypsy quarter. To the northwest lies a large citadel of Byzantine origin at an elevation of 951 ft. Before the present war it was used as military headquarters, and housed some civilian agencies. On the same side of the river, further east, is the massive stone Kurshumli Han, a fortified trading-post of the middle ages, now used as a museum.

The newer eastern part of the city, on the left bank of the river, is connected with the old city by a large stone bridge built in the 14th century. The main street, traversing the city from the railway station, crosses this bridge. The modern city, which has grown with great rapidity, has a large Institute for Malaria Research, an Officers Home (Oficirski Dom), a national theater, a national bank, and several important commercial and government buildings. Frequent floods are being avoided by straightening the course of the Vardar and Serava rivers and raising their banks. 740/

Climate. Skoplje has a continental climate, with wide variations in temperature. The annual temperature average varies between 53° and 55° F. In January, 1938 the maximum and minimum temperature were 54.7° and -3.1° F.; in July, 36.5° and 13.1°. The annual precipitation in 1938 was 17.1 inches which represents the average yearly rainfall. In 1936, it was 17.4 inches, and in 1935, 24.1 inches. Atmospheric pressure averages 741.2 millibars (1927-31), humidity 71. There are 75 to 85 rainy days, 10 snowy and up to 60 foggy days a year. 741/

Population. In 1931 the population was 68,334, and in 1936 it was 70,716. 742/

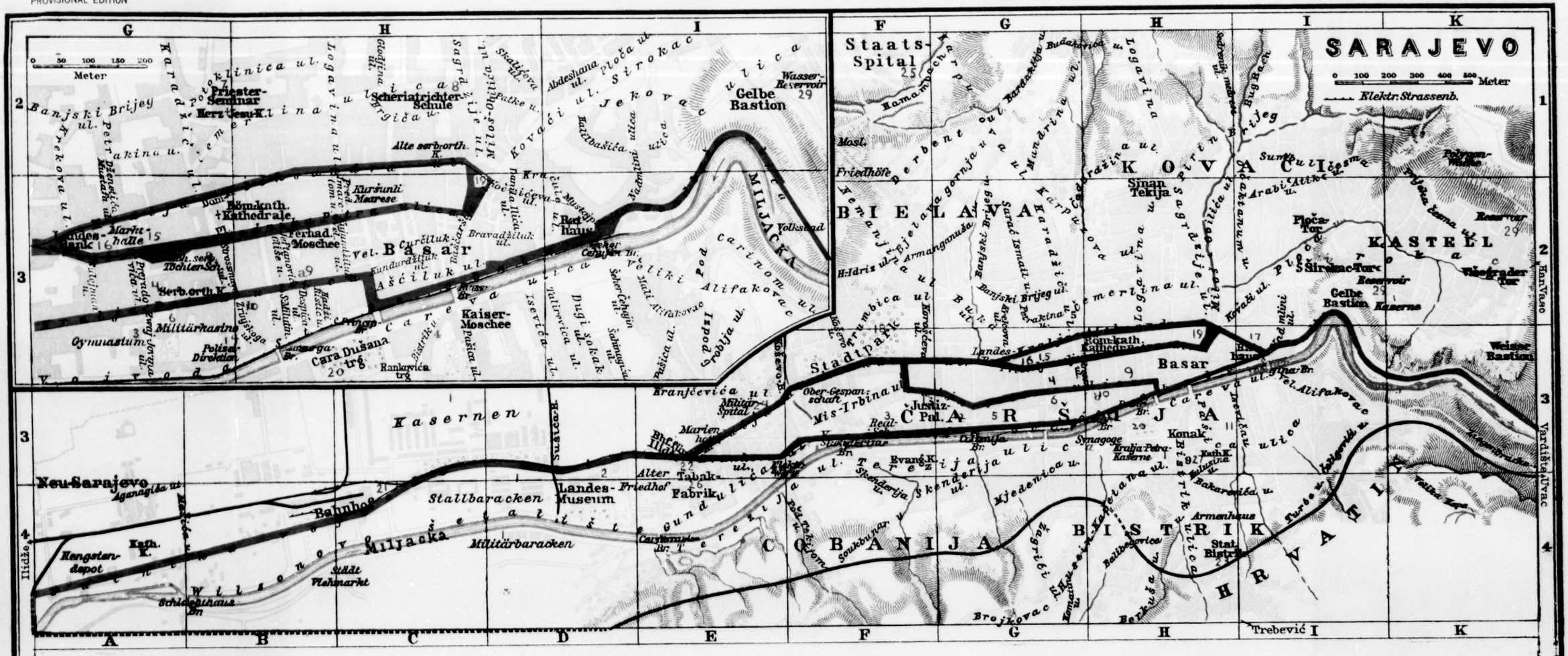
Subsequent increases nullified by war casualties in April, 1941, have probably been made up by the influx of Bulgarian officials and military men.

Due to its large size, the following document has been filmed in segments. The order of the segments is as follows: left to right, top to bottom.

PROVISIONAL EDITION

RESTRICTED

SARAJEVO



Billeting Facilities

1. Barracks (C 3, 4; D 3, 4; H 3; K 2)
2. Museum (D 3, 4)
3. High School (F 3; G 3)
4. Arts and Crafts School (G 3; old number; 10)
5. Theater (G 3; old number 10)
6. Officers Club (G 3)
7. Priests' Seminary (G I H 2)
8. Sheriats' School (H 2)
9. Hotel Europe (H 3; old number: a)
10. Hotel Central (H 3; old number: b)
11. School for Police Officers (H 3; old number: 7)

Principal Buildings

12. Post Office (G 3; old number: 8)
13. Courthouse (F/G 3)
14. Police Headquarters (G 3)
15. Municipal Market (G 3)
16. Regional Bank (G 3)
17. Townhall (I 3)

Potential Open Storage Spaces

18. Public Park (F 2, 3)
19. Market Square (H 3)
20. Tsar Dusshan Square (H 3)

(also 2: Botanical Garden, inside Museum)

Railroad Stations

21. Main Station (C 4)
22. Station for Ilidza (E 3)
23. Bistric Station (H 4)

Hospitals

24. Military Hospital (E 3)
25. State Hospital (F 1)

Factories

26. Tobacco Factory (E 3, 4)
27. Carpet Factory (H 3; old number: 9)

Utilities

28. Power Plant (E/F 3)
29. Water Reservoir (I 2; K 2)

Main Roads

20 NOVEMBER 1943
MAP NO. 2772

R & A, OSS
REPRODUCED, OSS

The 1936 nationality division was as follows: 743/

Yugoslavs	40,808
Turks	18,691
Jews	3,284
Albanians	1,964
Gypsies	2,456
Russians	697
Armenians	433
Greeks	266
Cincars	107
Others	2,010
Total	70,716

Religious groups were:

Orthodox	42,329
Catholic	1,313
Moslem	23,111
Jewish	3,284
Others	179
Total	70,716

The occupational division of the actively employed inhabitants (out of a total of 68,334) in 1931, was as follows: 744

Agriculture, forestry and fishing	3,995
Industry and handcrafts	8,626
Commerce and communications	5,480
Government, liberal professions, army	7,506
Others	4,312
Total	29,919

In addition to the native food industries, the people are becoming increasingly dependent on the growing metal and coal mining industries which have developed in the Macedonian mountains in the last 10 years. The percentage of artisans is still high. 745/

Utilities. Skoplje's water supply, which comes from the upper Vardar and its tributaries, is ample. The reservoir and filtering plant at Rashcha, 7.5 miles west of the city, were enlarged in 1938 to allow for a maximum flow of 792.5 gallons per second. The actual flow in that year was 21.1 gal. per second. Some 4,000 houses and buildings had running water. 746/

Sewers are adequate in the new section on the left (N) bank of the Vardar, but conditions in the old sections are primitive.

Electric power for Skoplje and most of the Vardar valley is produced at the new hydro-electric plant on the Treska river about 9 miles WSW of the town. The plant has three 1,500 H.P. turbines and can supply up to 27 million kw. h. per year. 747/

Industry. Skoplje, whose industrial development dates back only to the 1920's, has over 40 large or medium
(1320) industrial enterprises which consume local raw materials. The majority produce food stuffs, but an increasing number of metal works is being added. These use lignite, mined

at Nerez and Katlanov, chrome from the Dervenska Gorge, lead, manganese, antimony and other recently developed ore deposits.

The opening of a new hydro-electric station in 1936 has given industry a great boost. The glass industry, based on quartz sand found on the Vodnjanska mountain is growing. 748/

The largest single enterprise was the flour mill "Balkan, whose motors had a total power of 505 H.P. It had a productiv capacity of 176,400 lbs. per 24 hours. 749/ In 1931, the Parna Pivara, a.d. (brewery) had an annual capacity of 40,000 hectoliters, and the Todor Grebenarovich Soap Factory had an annual capacity of 1,000 tons. 750/

Supplies. In 1929 Skoplje produced the following commodities: coal, lumber, asbestos, cast iron, chemicals, woolens, furniture, leather, soap, canned foods, beer, liquor and wines, cement, building materials, pottery, leather, flour, household utensils, and cardboard. 751/ In 1934, the following additional commodities were being produced: macaroni, lumber, ice, carpets, cotton textiles (3 mills), hosiery, hats, bricks, metal furniture, and umbrellas. 752/ Heavy metal goods, machinery and most other manufactures must be brought in from elsewhere.

Highway Connections. Skoplje is on the main highway from Salonika via Bitolj, Skoplje and Nish to Belgrade. It is passable in all seasons except after heavy snow, but in parts it is very bad in wet weather. First-class roads run to Kachanik, Kumanovo, Tetovo and Veles. 753/ Belgrade is 288 miles, and Bitolj, 92 miles from Skoplje. Another road to Belgrade, via the Ibar valley, goes via Kragujevac (208 miles). 754/ Secondary roads run west to Prizren, south to Lake Ohrid (about 140 mi.). Many roads in this area have been improved in recent years.

Transportation. There are no street cars. Taxis and carriages were available. Buses ran to Katlanovo, to Lake Ohrid, Bitolj, Glumcin and Kratovo. Direct lines now run to Sofia, via Kiustendil, and other Bulgarian cities. 755/ Auto repair facilities are relatively adequate only for local traffic.

Railways. The main line from Belgrade to Salonika runs via Nish to Skoplje (129 miles from Nish). An alternate line from Belgrade runs via Lapovo, Kraljevo and the Ibar valley, to Skoplje (209 miles). A narrow gauge line runs up the Vardar valley W to Tetovo, then S to Ohrid. 756/ There are roundhouse and repair facilities and a new station.

Air Transportation. Before the war there was a customs airport at Skoplje, 1.9 miles SE of the city (41° 57' 21° 26' E.). Its dimensions were 4,920 x 4,590 ft. There were hangars and repair facilities. The field is at an elevation of 787 ft. 757/ During the period from May 1 to October 1, each year, there was daily air service in both directions, between Skoplje and Belgrade. During this period there was also one flight in each direction on Sundays over the Belgrade-Skoplje-Salonika route. 758/

Communications. Skoplje was administration center for one of the 8 districts of the Ministry of Posts, Telegraph and Telephone. There were 277 telegraph sets and 3,286 telephone subscribers in the district in 1938. In the city itself there were 6 post offices. There was no radio telegraphic service or broadcasting station in 1938. There were 9,115 receiving sets in the whole of Skoplje district. 75

Health and Sanitation. Skoplje has a large sanatorium, a military hospital, a regional state hospital and several private ones. 760/ The Institute for Malaria Research examined 224,351 persons in 1938. During the period 1934-1937, 720 deaths, or 16.86 per cent of all deaths, were caused by pulmonary tuberculosis. 762/ The regional hospital in 1937 ha 13 doctors, a technical staff of 58, and 250 beds. 761/

Municipal Government. Until April, 1941, Skoplje was capital of the Vardarska Banovina and the seat of Skoplje county. Its municipal government was in the hands of a mayor and an elected council. Since 1941, Bulgarian administrative institutions have been introduced. Skoplje is the capital of the Skopje Oblast (Region), with Dr. Raev as director (1942). The mayor is Rusi Slaveikov.

Skoplje had appelate, district and administrative courts A court of appeals is now functioning. It was the seat of a metropolitan, but the Bulgarians have moved the metropolitan's headquarters to Ohrid.

Newspapers. Since the Bulgarian occupation, "Tselokupna Bulgariia" (Greater Bulgaria) has been published in Skoplje, in Bulgarian, for all of Bulgarian-occupied Macedonia.

Military Considerations. Former headquarters of the Third Army Area and a frontier guard sector. Two infantry regiments, 1 artillery brigade, 1 heavy artillery regiment, 1 field artillery regiment, 1 cavalry regiment, 1 engineering regiment, and 1 air squadron were quartered in Skoplje. There was an aerodrome, military court, artillery workshop, military hospital, and military veterinary hospital. 763/

14. Split (Spalato)

Importance. Split, largest city in Dalmatia, with rail connections to the interior, of the country, is one of the chief outlets for the seaborne commerce of northern Yugoslavia. It has considerable manufacturing plants and is a fishing and tourist center. Because of its position, most of the produce of Yugoslavia's fertile regions -- Vojvodina, Serbia and Bosnia -- gravitate toward it, although Split lacks adequate railway connections with this economic hinterland.

Location. On the Adriatic, about halfway between Albania and the Italian border, at 43° 20' N., 16° 23' E. 764/

Split is located on a small peninsula, a rocky point about 5 miles long, jutting out into the Adriatic. The east end of Kashtelanski Bay, separating the peninsula from the mainland has gradually been developed into a large port (Vranjic-Solin). The old port is on the southern side of the peninsula. Split is dominated by 584-foot Mt. Marjan, on the tip of the peninsula, on the west side of the city. (See attached city plan and map). 765/

Description. The nucleus of the city is contained within the walls of Diocletian's ancient palace, an area of 74 acres. 766/ Within this space there is a labyrinth of extremely narrow alleys, 6-foot courts, and subterranean passages. 767/ The city extends to some distance both east and west of the walled part, along the shores of the bay. Split Commune has an area of about 33 sq. miles, 4 sq. mi. of which are Chiovo Island. Except for the narrow medieval streets in the older parts of the town, Split has good hard surfaced streets. New streets were being built and old ones asphalted. 768/

In addition to a number of historic and ancient building there are many new and large ones in Split. In 1931 Split Commune had 3,420 houses, of which 2,335 were in the town and 1,085 in the villages. In 1934 there were nineteen hotels with a total of 655 beds, two post offices, an opera house, three movies, eight banks, four museums, a picture gallery, a public library, and thirteen foreign consulates.

As center of Primorska Banovina, banovinal offices and institutions were centered in Split. Schools included a Catholic theological school, and six secondary schools. A meteorological observatory, and headquarters of several national organizations are in Split. 769/

Climate. Moderate. The average temperature in 1938 of the coldest month was 42.6° F. and of the warmest month (July) 80.1° F. Lowest average humidity in 1938 was recorded in July -- 52 -- and the highest average humidity in November -- 73. Average annual barometric pressure in 1938 was 750.8 millibars -- lowest in July, 747.1; highest in March, 755.5. In 1938 annual precipitation was 27.1 inches -- highest being in August (4.5), and lowest in March (0.41), and July (0.43 inches). In that year, Split had 117 rainy, one snowy, two foggy, 45 stormy, and 32 days of tempest. 770/

During the fall, winter and spring, two strong winds frequently blow in Split -- the bura and jugo. The bura, a cold wind, sweeps from the north bringing cold and dry temperature. The Adriatic is calm during the bura and the tide is low. The jugo blows steadily, but is not always strong. During the jugo humidity is high, clouds are thick, tide is high and waves large. During the summer, pleasant westerly winds ("maestral") blow over the city. 771/

Climate is suitable for Mediterranean vegetation, and palms, figs, grapes, and olives grow here.

Population. In 1931, (latest figures available), Split had a population of 35,417, and the Commune of Split had 43,711 inhabitants. Since its population had grown by about 10,000 between 1918 and 1931, 772/ it can be assumed that on the eve of the war the population of the Split Commune exceeded 50,000.

In 1931, religious affiliation in the Commune of Split were as follows: 773/

Roman Catholics	41,269
Orthodox	1,793
Protestants	73
Other Christians	170
Moslems	100
Others	306

In 1921 with a population of 31,681, the Split Commune showed the following linguistic division:

Serbo-Croats	29,770
Slovenes	283
Other Slavs	93
Rumanians	53
Italians	1,295
Germans	108
Magyars	10
Albanians	37
Others	132

According to occupation and occupational dependency the population in 1931 was divided as follows: 774/

Agriculture, forestry, fishing	9,641
Industry and trades	11,597
Commerce, credit, communications	8,115
Public service, professional, army	6,744
Other occupations	7,614
Total	43,711

Politically, Split was known as the fortress of Yugoslavism. The strongest Yugoslav political element was Macek's Peasant Party.

Utilities.

(a) Water. A good water system exists, which has been improved and extended in recent years. The canal from the (1320) Jadro spring to the pump station at Koplica was renovated and rearranged and a new station was built at Koplica,

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(1320)

which consists of a basin for sedimentation (70,000 cubic feet), fast mechanical filters, a basin for pure water (94,500 cubic feet), and a pumping station. In the course of 1928 and 1929, two reservoirs were constructed: one on Mt. Marjan, 207 ft. above the sea level, with a capacity of 87,500 cu. ft., and another at Gripe, 210 ft. above the sea level, with a capacity of 2,625 cu. ft. Pipe lines about 1.4 miles long connect the two reservoirs. The supply is adequate for present and future needs of the city, and will yield a maximum of 211 gallons per second. By the end of 1928, Split, including Mravince, Solin-Kashtela, Solin-Strana and Vranjic, had about 17.7 mi. of 2 to 8 inch water pipe-lines. In 1930 there were 1,460 water connections in Split.

(b) Gas. Split has had a city-owned gas light system since 1862, supplemented by an electric system since the early twenties. Since 1925, a new gas generator has produced about 1,250,000 cubic yards annually. The capacity of the gas tank was enlarged in 1926 from 1,046 to 2,093 cubic yards. The number of gas consumers in 1928 was 1,184. In 1928, the gas net was 7.1 miles long, and of very great importance because of the lack of other types of fuel.

(c) Electricity. Split is well supplied with electricity The main source of power is the powerful Gubovica hydroelectric station at Kraljevica on the Cetina river. By contract with the calcium-carbide company at Dugomrat (14 miles from Split), the Split Electric Co. had at least 4,000 k.w. at its disposal at all times.

A 50-k.v. cable brings the current to a large modern transformer, located at Dujmovac, 2 miles north of Split on the road to Solin, from where it is distributed to Split and neighboring towns over 10 k.v. lines. In 1928 there were 8 small transformers in Split (total 1,200 k.v.a.) providing 380/220 volt current for consumers.

Other sources of power in the past have been a small municipal thermal plant operated by 2 Diesel engines of 100 H.P. each, and an additional 200 H.P. furnished by the Split cement factory at Majdan, derived from a hydroelectric plant on the Jadro river.

In 1928, Split used 1,590,245 k.w. hrs. In addition, the large cement works in the vicinity of Vranjic port, north of Split, had an annual consumption of 20 million k.w. hrs. of power produced independently.

Industry. In 1930, there were 4,442 commercial, 1,880 trade, and 152 industrial enterprises in Split. Manufacture of cement and cement products occupies first place. In 1930, there were five large cement factories with a normal annual capacity of 650,000 tons. About 25 enterprises near Omish and Kashtel excavate "marle" clay used in cement production and exported up to 400,000 tons a year to Italian and other cement factories. Cement is an export commodity and was shipped to the Near and Far East, Africa and South America. Its quality is very good.

(1320) Next in importance is clinker and artificial asbestos. In 1929, 7,895 tons of it were exported, mostly to Canada and Egypt. Most of it was produced by the "Split" cement factory, which also developed artificial asbestos (Salonit) for roofing. In 1929, 10,307 tons were exported--mostly to England and India.

A number of bauxite mines are located in the vicinity of Split and in other parts of Dalmatia and Hercegovina. Most of the bauxite was exported through Split. Split is als the center of all important marble and stone industry.

In the region between Split and Omish are large cyanamide and carbide factories. In 1929, they exported 26,705 tons of cyanamide, and 13,048 tons of carbide. Most of it went to Italy, Greece, India and Japan.

There are several small machine shops and foundries, only one ("Marjan") is relatively large and modern. Shipbuilding was in its beginning though making considerable progress. There are several smaller industries in Split, including leather, spaghetti, milling, fish preserving, liquor, chemicals, electricity (all neighboring cement factories produced their own electricity), and meat, ice, rope, candles and soap.

A new slaughter and packing house was built in 1930 which handled 32 oxen, 150 pigs, 200-300 sheep, goats, etc., and 100 calves daily.

Split and the surrounding regions also produce and export two important industrial plants: tobacco and pyrethrum.

Supply.

(a) Food. Split is not an abundant food producing area. Its immediate hinterland is the Karst region where people barely maintain their livelihood even in normal times. In 1921 the County of Split produced 65,800 bushels of wheat, 60,250 bushels of corn, and 45,980 bushels of barley. The annual production subsequently increased. Vegetables and potatoes are produced in lesser quantity.

In 1929 it was the fourth largest wine producing region in Dalmatia, producing in that year 1,800,000 gallons, only about 300,000 gals, of which was consumed in Split. In 1929 Split County produced 171,700 gallons of olive oil - much of it being exported into other regions of Yugoslavia.

Split county grows more cherries than all the rest of Dalmatia. In 1929 it produced 15,600 bushels, mostly for making the famed "marashkin" liqueur. The county also produces some apples, pears, prunes, walnuts, and figs. In production of figs Split led over rest of Dalmatia. In 1929 30,080 bushels were produced.

In 1929 Split fishermen caught 2,562 tons of fish. Most of this was sold on the domestic market. 14.6 tons were exported fresh, 287 tons were packed in oil and 870 tons in salt.

In 1921 there were 3,713 horses, 3,269 donkeys, 1,063 mules, 9,692 heads of cattle, 8,925 pigs, 102,505 sheep, 18,963 goats, 85,388 poultry and 2,468 bee-hives in Split county. This remained almost unchanged until 1930. No later information is available.

(1320) (b) Fuel. See Appendix B, "Maritime Shipping".

(c) Construction materials. Stone, cement and various cement products are available in unlimited quantities. Wood could be obtained from neighboring regions of Bosnia.

9. Highway Connections. Satisfactory highway connections exist with all important Yugoslav cities. The Kotor-Sushak coastal highway goes via Split. Split has good highway connections with Belgrade(410 miles), Sarajevo (180 miles), Zagreb (264 miles) and Ljubljana (330 miles). The main traffic artery through the city of Split is the Solin-Split-Omish road which connects Split with other important highways. 775 /

10. Transportation. In 1928 there were 12 busses serving the city and the nearby towns of Bachvice, Solin and Trogir. 776 /

Split also had adequate interurban bus connections. In 1934 there were daily runs to Omish, Makarska, Shestanovac, Imotski, Mostar, Travnik, Trilj, Arzhano and Much. There were several daily runs to Sinj and Vrlika. 777 / In 1930 there were 90 automobiles in Split (50 of which were taxis) 30 trucks, 50 motorcycles, 150 freight carts and 305 field and peasant carts. Two large garages were built in 1929 and in 1934 there were about 10 firms selling automobile parts. 778 /

Railways. Split is the terminus of a normal gauge line from Ogulin, on the Fiume-Zagreb trunk line. About 15.5 miles west of Split, at Perkovich-Slivno, a normal gauge branch runs to Shibenik (9.3 miles), and a narrow gauge line (2 feet 6 inches) runs northeast to Sinj. The distance to Belgrade will be greatly reduced upon completion of the Bihach-Knin section of the Sunja-Knin normal gauge line. 779/

Because the railway station at the south end of the town was small and crowded, an auxillary one was built at Kopilica.

Air Transportation. A description of Divulje Seaplant Station and Split air service is given in the Appendix B, "Maritime Shipping".

Water Transportation. Split is one of Yugoslavia's most important ports. Regular services were maintained with Africa, South America, and elsewhere. Three shipping companies maintained fast runs between Split and Sushak, Trieste, Venice, Dubrovnik and Kotor. There were several lines between Ancona, Venice, Trieste, Zara, and Shibenik. Once weekly there were sailings to Albania and Greece. There were numerous small motor and sail boats on the Francuska and Mletachka piers. 780/

Description of shipping facilities is given in the Appendix B, "Maritime Shipping".

Health and Sanitation. Split had a regional hospital (a new one was under construction in 1930), a military hospital, and a private sanatorium equipped with modern facilities. There was in addition a travelling dispensary for venereal and skin diseases. Other medical institutions included a bacteriological station, dispensaries for lung diseases, and trachoma, a policlinic school, a hygienic institute, etc.

(1320)

The regional hospital had 215 beds in 1930, and handled 2,960 patients. The venereal section of the hospital handled 397 patients.

From 1918 to 1928, 494 died from tuberculosis. In 1930 the total number of deaths in Split was 501, caused principally by the following:

Congenital diseases	45	Apoplexy	25
Tuberculosis	61	Heart and blood diseases	42
Pneumonia	53	Tumors	21
Scarlet Fever	19	Other natural diseases	147
Cholera Infantum	30	Other natural deaths	36
Other contagious diseases	15		

Newspapers. At the end of 1930 about 17 newspapers were being published in Split. Two of these were dailies: "Novo Doba" (New Era), and "Jadranska Poshta" (Adriatic Post). Present publications are not known.

Municipal Government. Split is now under Italian occupation. The civil government of the city is probably controlled by a military commandant.

Before the creation of the Croatian Banovina in 1939, Split was the center of the Primorska Banovina. The banovinal government was in charge of gendarmerie, roads, public works, sanitation, law, etc. The Ban was appointed by the King.

The County administration, headed by a director nachelnik dealt with matters within county jurisdiction. The County Director was appointed by the King and was responsible to the Ban.

Leading Personalities. Little is known about the people in office under Italian occupation. Among those living abroad are Bogdan Radica, Yugoslav Press Attache in the United States, and Grga Andjelinovich, former senator and minister, who is reported to be in Washington, D.C.

Military Considerations. Docking and unloading facilities are considerable. Camping quarters and building space are probably ample for a good sized army. Normal gauge railway and good roads connect Split with the hinterland. Food insufficient.

15. Subotica (Szabadka, Maria Theresiopel)

Importance. Third largest Yugoslav city, Subotica is a strategic railway and communications center on the old Hungarian frontier. It is the agricultural and commercial focus of northern Yugoslavia, increasingly important industrially and as a livestock market. 781/

Location. Subotica (now Szabadka, under Hungarian rule), is located on the level, fertile steppe-like Bachka plain between the Danube and the Tisza rivers, at an elevation of 335 feet. Its coordinates are 46° 6' N., 19°40' E. 782/

The city is 56 mi. directly N. of Novi Sad (Ujvidek), 5 mi. S. of the old Hungarian border, 12 mi. W. of the Tisza and 40 mi. E. of the Danube. The nearest large city is Szegedin, Hungary, 25 mi. ENE.

Description. Subotica is in the center of a vast expanse of large level wheat and corn fields which come right up to the edge of the city. On the northern side vineyards alternate with grain and beyond them along the frontier are large forests. About 3 mi. E. is the J, or fish hook, shaped Palichsko lake (total length 3.7 mi.), with several smaller lakes around it and the town and bathing resort of Polich at its northern end.

The city is made up largely of 18,718 or more substantial 2-story brick houses, inhabited chiefly by the 51,159 persons engaged in or dependent upon agriculture. 783/ These farmers live in the city during the winter and spend the working seasons on their holdings. 784/

Streets are relatively wide and regular, and, except for churches, there are few outstanding buildings. There are at least 8 large schools. All the main thoroughfares and the central streets are paved.

The large railroad station area runs along the entire NE side of the city, with the main commercial and administrative area immediately SW of the station. 785/

Climate. Subotica is exposed to the N. and NW. winds, which prevail throughout the year, and has a relatively dry continental climate with hot summers. 786/

Mean annual temperature is about 51.8° F. with an absolute maximum and minimum range of from 98.2° to -5° F. Atmospheric pressure averages about 755 millibars and humidity 70. There are on the average, 100 rainy, 20 snowy, 10 stormy, and 20 foggy days a year. Precipitation averages between 17 and 20 inches.

Population. In 1931 there were 100,058 inhabitants. Though the population has doubled in 60 years, the present figure is less than it was in 1918 under Hungary. 787/

The religious and ethnic division in 1931 was as follows:

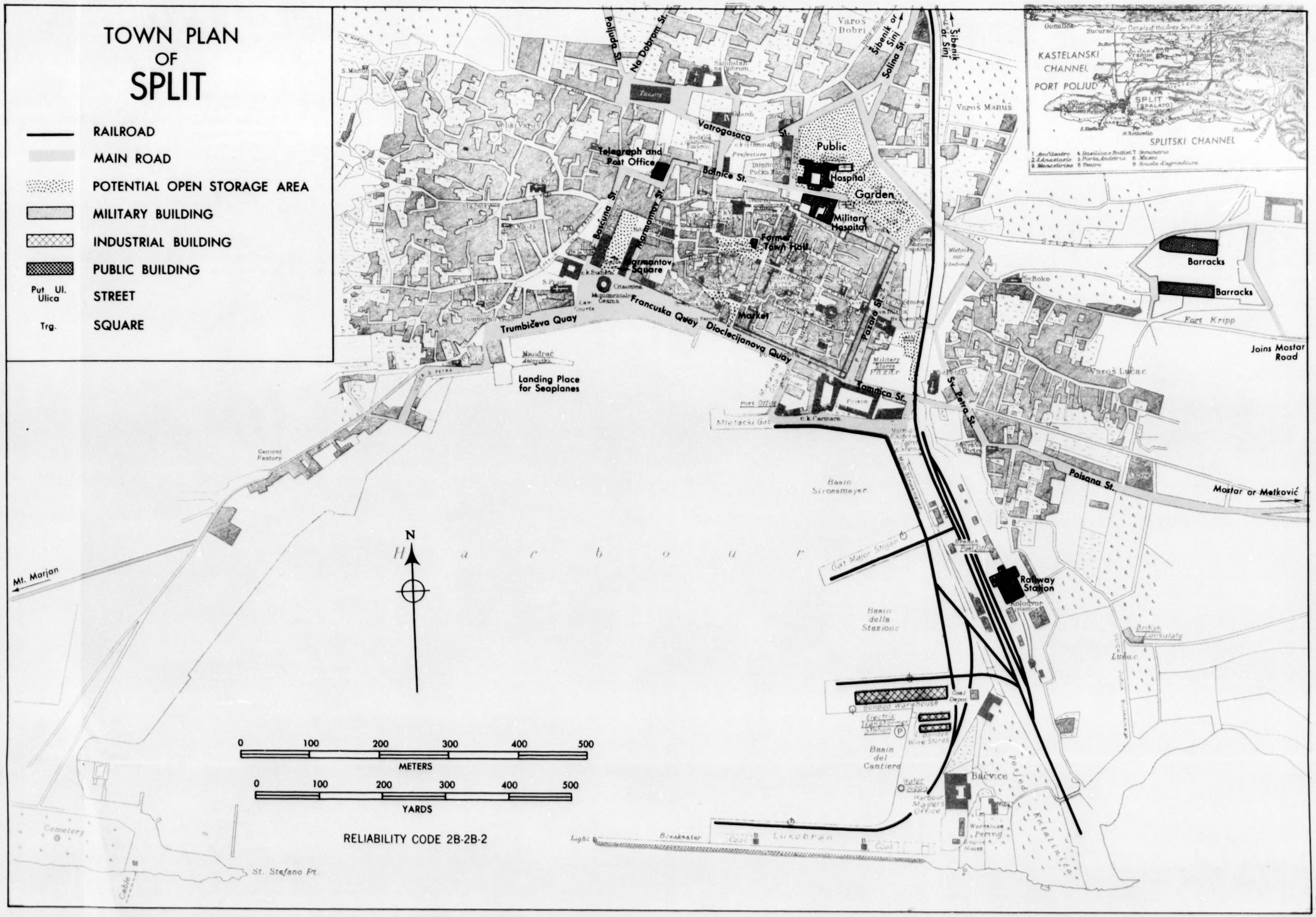
Due to its large size, the following document has been filmed in segments. The order of the segments is as follows: left to right, top to bottom.

PROVISIONAL EDITION

RESTRICTED

TOWN PLAN OF SPLIT

- RAILROAD
- MAIN ROAD
- POTENTIAL OPEN STORAGE AREA
- MILITARY BUILDING
- INDUSTRIAL BUILDING
- PUBLIC BUILDING
- Put Ul. Ulica — STREET
- Trg. — SQUARE



RELIABILITY CODE 2B-2B-2

MAP NO. 2705
19 NOVEMBER 1943

COMPILED AND DRAWN IN THE BRANCH OF RESEARCH AND ANALYSIS, OSS
LITHOGRAPHED IN THE REPRODUCTION BRANCH, OSS

Catholics	84,268
Orthodox (virtually all Serbs)	9,993
Protestant (Magyar, Slovak, and German)	1,274
Jews	5,758
Moslems and others	765
Total	100,058

More than half the Catholics are Magyars; the rest are Bunjevci (colonists who came from Dalmatia and Herzegovina in the 18th century), Germans and Croats. 788/

The occupational division of the 50,447 actively employe was: 789/

Agriculture, forestry, fishing	25,816
Industry and trades	10,291
Commerce and communications	5,761
Government, Army, liberal professions	4,233
Others	4,346
Total	50,444

Though more than one-fourth of the population was Magyar, the population was apparently satisfied and politically stable under Yugoslav rule. Principal reason was the distribution of land to the former Hungarian serfs by the Yugoslav government after 1919.

Utilities. Subotica has a thermal steam-electric plant serving the city, industry, city trolley system, and a large surrounding farm area. In 1929, with 5,300 consumers, the plant had motors totalling 1,360 h.p., transmission and generating voltage of 2,000 v., consumer voltage of 110-220 v., and a maximum recorded load of 870 kw. 790/

The city water system, supplied by local lakes and subterranean water is adequate.

There is a city gas works. Coal and other fuel has to be transported from considerable distances.

Industry is primarily agricultural in character, with flour, leather, fertilizers, lumber, furniture, sugar, alcohol, etc., the chief products. There are extensive brick factories. Other industrial activity is only of recent growth.

Typical of the rural character of the city is the great number of domestic industries. The people in their homes manufacture rugs, and knit goods, card wool and linen and weave cloth in large quantities. Tailoring and shoemaking fall within this class to a large extent, though there is a large boot factory. 791/

One of the largest single enterprises is the state locomotive and railroad car factory. A large iron foundry operated in conjunction with it. The car factory was reporte destroyed in April, 1941. It did more repair work than new production. 792/

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The "Zorka" chemical factory, which supplied the area with fertilizers, employed 200 and had a capacity of 33,000 tons of sulphuric acid, 78,000 tons of superphosphates, and large quantities of iron and copper sulphate. Its motors in 1931 totalled 700 h.p. 793/

Small shops or plants produced electrical equipment, starch, candy, animal products and hides, canned goods, cosmetics, enamel ware, cut stone, animal serum, agricultural machinery, paper, knit goods, and wine. There are 2 iron works and 2 foundries. 794/

Supplies. Large quantities of wheat and corn are produced in the region and stored for export as grain or flour. Subotica was the largest livestock center in northern Yugoslavia and exports included many good horses. Other supplies which more than satisfied local needs were: wine, horse hair, fertilizers, eggs and chickens, leather work tools, medicinal plants, soap, animal serum, home-made linen and woolen cloth, smoked meats and lard. Coal and wood were scarce. 795/

Highway connections. Subotica is not an important highway center. The new London-Istanbul international highway which passes through the city, entering from the south and leaving to the east, is the only important connection. In the Subotica sector it is surfaced with asphalt laid over large stones. The distance to Novi Sad is 72.1 mi., Belgrade 120 mi., Szeged (Hungary) 28.6 mi.

Paved highways, radiating from the city, end at the Hungarian frontier or in open country, and continue as dirt roads. All roads are level and wide, and even the dirt roads are good except in wet weather. First class roads southeast to Senta (25 mi.) and southwest to Sombor (35.4 mi.) were under construction in 1939. 796/

Transportation. There is a city street car system. Its capacity and rolling stock is shown in the following table: 797/

Exploited length	8.7 miles
No. of electric cars	16
No. of seats	704
No. of trailers	17
No. of seats	696
No. of transported passengers	1,236,688
No. of travelled car miles	365,000

Most transport is by automobile or horse cart. There were 5 transport companies in 1939. 798/

Bus lines are largely local.

Railways. Subotica is a vital railroad center. Large marshalling yards run along the whole northeast side of the city and there is a large rolling stock repair and construction plant. Seven lines, 3 of them international, converge on Subotica.

Most important is the trunk line from Belgrade (110.6 mi.) and Novi Sad (57 mi.) which continues north to Budapest (1320) via Kish Kun-Halas (25 mi.). This is the main railway artery from Vienna to the Balkans and the Near East. Lines

within former Yugoslav territory run to the junctions Senta on the Tisza (25 mi. SE), Sombor (34 mi. SW) and Crvenka (33 mi. S). These serve the needs of the Bachka farms. The remaining 2 lines run west to Baja (Hungary) on the Danube (34 mi.) and east-northeast to Szeged (Hungary) on the Tisza (27 mi.). Both were of limited importance until Subotica was taken over by Hungary in 1941. Express trains from Belgrade and Western Europe to Bucharest are routed via Subotica-Senta-Timisoara.

Communications. Subotica has a local telephone exchange and telegraph connections with the rest of the country. It lies on the main international telephone and telegraph trunk lines which run from Belgrade to Budapest and Vienna. Subotica had two post offices. In 1938, 6,998,744 pieces of mail, 38,212 telegrams, and 4,551,684 telephone calls were handled. 798a/ No broadcasting or radio telegraph station is reported.

Health. The City Hospital with about 300 beds had the following staff in 1935: 8 resident doctors, 51 nurses and technicians, and 26 orderlies and other employees. The Jewish hospital had 1 resident doctor, 7 nurses and technicians, and 10 others. 799/ Though the climate is relatively healthy, the number of diphtheria cases in the area is higher than in the rest of the country. Typhus is also relatively high. 800/

Municipal Government. Under Yugoslavia, Subotica was a "free city" with a certain amount of local autonomy, responsible directly to the Ministry of Interior. It had an appelate court and several courts of first instance.

Under Hungary, Subotica is a "free royal city" in the county of Bacs-Bodrog, whose county seat is Sombor.

Newspapers. Dailies were Jugoslovenski Dnevnik (Yugoslav Daily), Jugoszlaviai Magyar Ujsag and Naplo.

16. Zagreb (Agram).

Importance. Zagreb, second largest city in Yugoslavia, is the chief city and capital of present Croatia. It is located at the crossroads of numerous highways and is one of the most important railway junctions in Yugoslavia. It is also of considerable financial, industrial and commercial significance and is the cultural center for Croatians.

Location. The city is located at the upper end of the Sava Valley on the left (N) bank of the Sava river at an altitude of 394 feet. Its coordinates are 45° 49' N., 15° 58' E. 801/ North of Zagreb is the heavily wooded Zagrebachka Gora (Zagreb Mountain) with the Sljeme peak rising to 3,396 feet. The foothills reach into the N side of the town. 802/

Description. Zagreb is the most European and best laid out city in the country, with large handsome buildings, many parks and squares, and wide boulevards. The old part of the city, on the north side, overlooking the plain, contains an ancient fortress and the large old cathearal. Here also is the administrative center with many government buildings. It is connected with the lower, newer part of the city by a funicular railway.

The newer part of the city, located mainly between the old city and the main railway station on the south and extending east and west, has regular wide streets and most of the public buildings. These include the main railway station, the Academy of Sciences, national theatre, university and university library, Stock Exchange, and Workers Insurance Society building. A series of parks and squares connects the main railway station and the principal square (Jelachich) around which the life of the city centers. This square is on the main street (Ilica) which extends east and west for over two miles and separates the old and new parts of the city. See attached city plan and map.

The area of the city is about 25 sq. miles. In 1931, there were 12,669 residential buildings. There are two modern bridges crossing the Sava; one for the railway and the other for the highway to Karlovac. 803/

Climate. The meteorological station is located in the upper city, at an altitude of 533 feet. The mean annual temperature averages 52.9°F. Over the period 1921 to 1931 the following averages resulted: temperature range 83.7° (from 10° F. to 93.7° F.); atmospheric pressure 747.8 millibars; humidity, 75; days with rain 151; days with snow 27; stormy days 25; foggy days, 90; precipitation, 35 inches. Prevailing winds are NE and E. 804/

Population. According to the census of 1931, there were 185,581 inhabitants. 805/ The population was almost entirely Croat and Roman Catholic (158,000), with 13,000 Orthodox Serbs and small groups of Slovenes, Czechs, Germans, Magyars, Jews and Russians. 806/

The working population was divided as follows in 1931: 807/

Agriculture, forestry, fishing	2,845
Industry and trades	41,015
Commerce and communications	21,332
Government, army, liberal professions	20,066
Others	24,811
Total	110,069

(1320)

Though the city is now above 200,000 (1936) the proportional occupational division is about the same.

Utilities. Zagreb has several municipally owned utilities: a stock-yard, a water system, a gas works, which produced 226,501,171 cu. ft. of gas in 1931, and a steam power plant, which produced 30,000,000 kw. hrs. in 1933. 808/ The sewer system in 1930 had a length of 394,000 ft. 809/

Industry. Zagreb was one of the chief industrial centers of Yugoslavia. There are a number of establishments processing agricultural products, including the stock-yards, meat-packing plants, a large rice mill, 8 large flour-mills, distilleries, breweries, a sugar mill, and a vegetable oil factory. Much of the timber industry of Yugoslavia centered in Zagreb and produced building lumber, barrels, boxes, flooring, furniture, impregnated wood, plywood, pulp, and the like. The offices of several mining companies, chiefly those producing bauxite, gypsum, coal, and quicksilver were located in Zagreb. There was a substantial metal industry, making barrels, boilers, compressors, locomotives and railway cars, machinery, metal furniture, cutlery, pumps, farm machinery, power saws, and wire. Zagreb also produced electric batteries, cables, motors, electrodes and insulating materials. There was an important chemical industry, with such products as soap (one plant producing over 5,500 tons a year, and another 660 tons), dyes, paint, tar, oxygen, acetylene, and dynamite and other explosives. One factory had a capacity of 2,200 tons of oil paints and varnishes and 2,200 tons of dry paints annually; another factory had a capacity of 13,200 tons of tannic acid. Zagreb had 44 textile factories in 1938, making woolens, carpets, lace, linen cloth, cotton cloth, and knit goods. Other Zagreb products were pottery, leather, glass and paper. A boot factory produced 300 pairs a day in 1931, and a paper mill had an annual output of 3,815 tons. 810/ The state tobacco factory produced about 12 million cigars a year.

Supplies. Zagreb lies in a fertile area which in normal times has a food surplus. Ordinarily grain, meat, sugar, leather, lumber, metals and textiles are available in Zagreb. As Zagreb is the heart of Croatia and as the control of the Ustashi in Croatia depends on their control of Zagreb it may be assumed that they have provided for the city's needs. These, however, only include the bare necessities, distribution of which is controlled by the government. Evidence of the difficult food situation is the plan to open several public kitchens, where some thousands of workers can be fed. 811/

Highways. Zagreb is an important road center. It is on the first-class highway running from western Europe via Ljubljana to Zagreb (91 miles), to Belgrade (283 miles from Zagreb), and on to Sofia and Istanbul. To the northeast a road leads to Koprivnica and Budapest (239 miles). Another runs north to Maribor (87 miles) and Vienna (168 miles beyond Maribor). An important road runs southwest thru the mountains to Sushak and Fiume on the Adriatic (122 miles). Zagreb also has road connections with Shibenik and Split on the Adriatic. 812/ Some of these roads may have been improved as, in 1940, the Yugoslav government planned to widen the road from Belgrade through Zagreb and Ljubljana to the frontier, and from Zagreb to Sushak. 813/

Local Transportation. In 1938, Zagreb had a street-railway system which transported 45,590,273 passengers over 13.7 miles of track. 814/ All of the 11 lines radiate from Jelachich Square. In 1936, urban autobusses supplemented the street-railways. There was also bus service to Ljubljana, Novo Mesto, Samobor, Karlovac, Rogashka Slatina, and the Plitvice lakes. 815/ In normal times Zagreb is well supplied with horses, automobiles, and motor trucks. There are probably good facilities for repair, as the machine and electrical industries were fairly well developed.

(1320)

Railways. Four important lines converge on Zagreb, which is a division headquarters of the state railways. These include the

international trunk line from Istanbul and Sofia, which goes via Belgrade (266 miles); west of Zagreb it continues to Zidani Most junction (78 miles) where one line (used by the Orient Express)continues west to Milan and Western Europe via Ljubljana (38 miles), while another goes north to Vienna via Maribor (106 miles) and Graz. An alternate route parallels the main line east via Sisak to Novska, where it rejoins the main line (which is double tracked from Novska to Belgrade). At Sunja on this alternate there are connections with Bihach and Banja Luka. Zagreb is also on the important route which runs between Fiume and Sushak (142 miles) on the Adriatic/ junction at Ogulin with line to Shibenik (247 miles) and Split (263 miles) on the coast/ and Budapest (239 miles) via Koprivnica (55 miles).

There are three stations: the main station (Glavni Kolodvor) fronting on a large square in the south-central part of the city, is used by all trains; on the west side south of the barracks, is the Sava station. Near the latter is the small Samobor terminal for the short narrow gauge line to Samobor, west of Zagreb. 816/

In 1921, the railway yards were 3,936 feet long, with 11 sidings, four of them for passenger trains. There were 21,325 feet of track in these 11 sidings, and 9,840 feet of other sidings near-by. An additional 9,840 feet of sidings led to factories in the city. There was a roundhouse for 36 locomotives, a repair shop, two brick or stone warehouses, each 49 feet wide (the larger was 469 feet long and had an area of 23,089 square feet), and four smaller wooden warehouses. There was a ramp 689 feet long for loading animals, wagons or guns. 817/ There are probably much larger facilities available now.

Air Transportation. The airport, 2,953 x 3,280 feet, is located about 4 miles east southeast of the town at N. 45° 48' 31", E. 16° 02' 04" and at an elevation of 400 feet. It is equipped with radio, hangars and repair facilities. 818/

Before the war Zagreb was on the Turin-Milan-Venice-Zagreb-Belgrade-Bucharest route, with daily service; in summer there was daily service to Belgrade via Borovo, Ljubljana, Split and Dubrovnik, Sarajevo, and Vienna. 819/

The Axis is reported to have enlarged the facilities at Zagreb and to be using them for a bomber base.

Communications. Zagreb was the headquarters of one of the administrative districts of the Ministry of Posts, Telegraphs and Telephones, and was connected with all parts of Yugoslavia. There was a radio telegraph station, YTZ, of 3,000 watts, using a wave-length of 55.72 meters. 820/ There was a broadcasting station in 1940, with 800 watt power, using a 276 meter wave length. The antennae were 161 feet above ground. There were 27,749 receiving sets in the Zagreb district in 1938. 821/

Health and Sanitation. Zagreb has an adequate sewer system and its water supply is good.

In 1930, the incidence of and mortality from infectious diseases was as follows: 822/

Diphtheria	206 cases	23 deaths
Scarlet fever	222 "	19 "
Typhoid	52 "	9 "
Dysentery	64 "	6 "
"Vrbanac"	196 "	10 "

(1320)

There were 1,489 deaths from pulmonary tuberculosis during 1933-37, or 14.39 per cent of all deaths during this period. 823/ About 35,700

persons were examined for malaria in 1938. 824/ In 1930 there were 5 hospitals and 3 sanatoria, with a total of 2,300 beds. 825/ In 1935 the 3 state hospitals had 84 doctors and a technical staff of 350.

Leading personalities. Zagreb Croats whose prestige is greatest in Yugoslavia are Juraj Krnjevich, one of the Vice-Premiers on the present Yugoslav government in London; Ivan Subashich, former ban of the Croatian Banovina; Vlatko Machek, Chief of the Croatian Peasant Party; Andrija Shtampar, internationally known medical specialist, and Ivan Meshtrovich, the world famed sculptor.

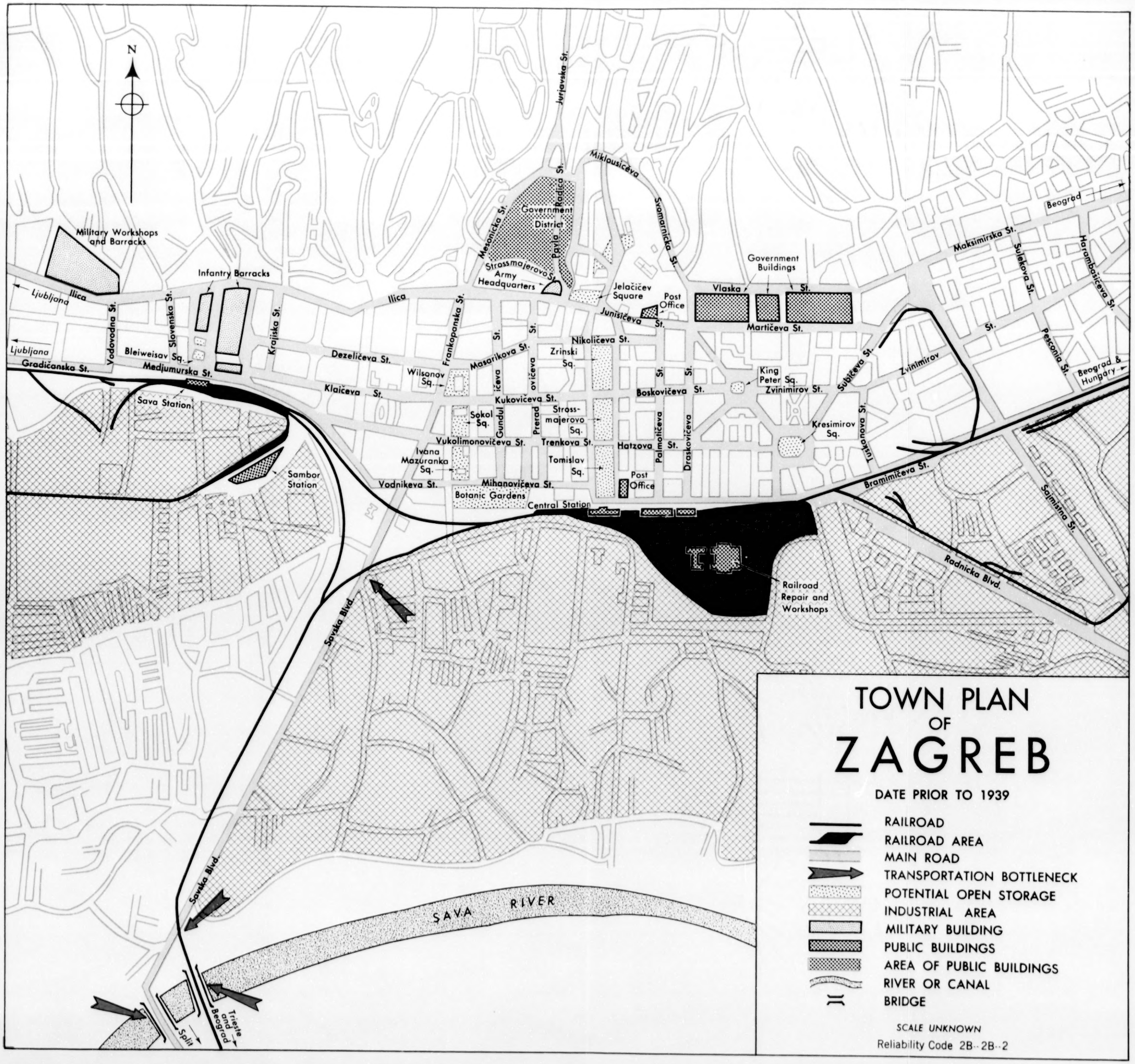
Newspapers. At least nine newspapers were published in Zagreb befor the war: Jugoslovenski Loyd (Yugoslav Lloyd), Jutarnji List (Morning Paper), Hrvatska Straza (Croatian), Morgenblatt, Narodne Novine (National Paper), Novosti (News), Obzor (Review), Vecher (Evening), and Hrvatski Dnevnik (Croatian Daily). Largest of these was Novosti, which reflected the policies of the government, and Hrvatski Dnevnik, which was the organ of the Croatian Peasant Party.

At present fascist papers appearing in Zagreb include Deutsche Zeitung in Kroatien, Hrvatski Narod (Croatian People), Nova Hrvatska (New Croatia), Neue Ordnung, and Zbornik (Collection). All are government controlled.

Municipal government. Zagreb was a county and banovina seat. The Ban of Autonomous Croatia was perhaps, next to King, the highest authority in Yugoslavia. Croatia had autonomous administration in all but finance and national defense. There were many important national administrative offices in Zagreb, in addition to the municipal and local ones. Zagreb is at present the capital of the Croatian state and residence of Ante Pavelich, the Poglavnik (Croat Führer).

Military Considerations. Zagreb had 4 barracks and an artillery stable in 1921, on the western side of the city. There were 2 military magazines in the northern part. 826/ Before the war it was the headquarters of the Fourth Army Area. Now it is one of the headquarters of the Axis occupation forces and the airdrome is being used for military purposes.

Due to its large size, the following document has been filmed in segments. The order of the segments is as follows: left to right, top to bottom.



TOWN PLAN OF ZAGREB

DATE PRIOR TO 1939

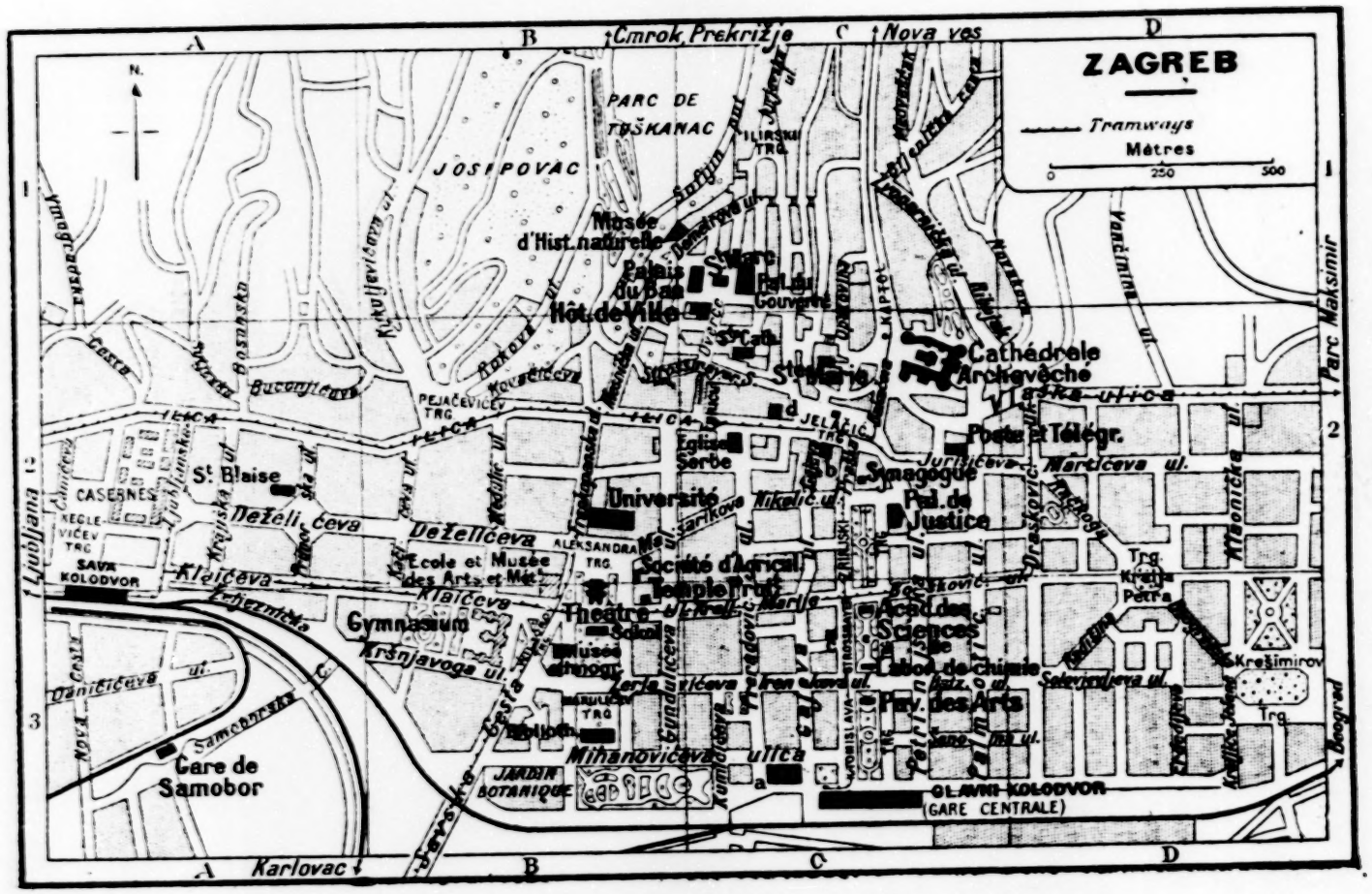
- RAILROAD
- RAILROAD AREA
- MAIN ROAD
- TRANSPORTATION BOTTLENECK
- POTENTIAL OPEN STORAGE
- INDUSTRIAL AREA
- MILITARY BUILDING
- PUBLIC BUILDINGS
- AREA OF PUBLIC BUILDINGS
- RIVER OR CANAL
- BRIDGE

SCALE UNKNOWN

Reliability Code 2B--2B--2

MAP NO. 2800
17 NOVEMBER 1943

COMPILED AND DRAWN IN THE BRANCH OF RESEARCH AND ANALYSIS, OSS
LITHOGRAPHED IN THE REPRODUCTION BRANCH, OSS


ZAGREB
Tramways
Mètres
0
250
500
Cmrok, Prekrižje
Nova ves
PARC DE TUŠKANAC
JOSIPOVAC
Musée d'Hist.naturelle
Palais du Ban
Hôt.de Ville
Cathédrale Archevêché
Poste et Télégr.
Marićeva ul.
Parc Maksimir
St. Blaise
CASERNES
Université
Synagogue
Pal.de Justice
Ecole et Musée des Arts et Mét.
Société d'Agricul.
Jardin fruitier
Theatre
Gymnasium
Académie des Sciences
Institut de chimie
Palais des Arts
Care de Samobor
JARDIN BOTANIQUE
GLAVNI KOLODVOR
(GARE CENTRALE)
Karlovac
Ljubljana
Mihanovićeva ulica
Deželićeva
Klaićeva
Krenjavoga ul.
Trg Kralja Petra
Trg Kralja Tomislava
Trg Krešimirov
Trg J. Jelačića
Trg Petra Preradovića
Trg Republike
Trg Žrtava fašizma
Trg Mažuranića
Trg Nikole Šubića Zrinskog
Trg Bana Josipa Jelačića
Trg Kralja Petra Svačića
Trg Stjepana Radića
Trg Petra Zrinskog
Trg Ante Starčevića
Trg Petra Krešimira IV
Trg Petra Svačića
Trg Petra Preradov